

DVTeI

Pro Series Outdoor PTZ Cameras

CP-11xx through CP-21xx



Outdoor

Installation & User Guide

Version 3.2.1

Preface

Information given in this manual was current when published. The company reserves the right to revise and improve its products. All specifications are subject to change without notice.

Notice

This manual provides installation information for the outdoor Pro Series PTZ Camera. To work with the PTZ Cameras, any installer or technician must have the following minimum qualifications:

- A basic knowledge of CCTV systems and components
- A basic knowledge of electrical wiring and low-voltage electrical hookups
- A basic knowledge of network system setting
- Have read this manual completely

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Important Information

Before proceeding, please read and observe all instructions and warnings in this manual. Retain this manual with the original bill of sale for future reference and, if necessary, warranty service. When unpacking your unit, check for missing or damaged items. If any item is missing, or if damage is evident, DO NOT INSTALL OR OPERATE THIS PRODUCT. Contact your dealer for assistance.

Regulation

	This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
	This symbol on the product or on its packaging indicates that this product shall not be treated as household waste in accordance with Directive 2002/96/EC. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By proper waste handling of this product you ensure that it has no negative consequences for the environment and human health, which could otherwise be caused if this product is thrown into the garbage bin. The recycling of materials will help to conserve natural resources. For more details information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.
	Compliance is evidenced by written declaration from our suppliers, assuring that any potential trace contamination levels of restricted substances are below the maximum level set by EU Directive 2002/95/EC, or are exempted due to their application.

Warnings and Cautions

- **Handle the camera carefully**

Do not abuse the camera. Avoid striking, shaking, etc. The camera is a precision device that could be damaged by improper handling or storage.

- **Wiring**

All wiring must be completed in accordance with local electrical regulations. Please note that input power to the unit has a tolerance of AC 24V $\pm$ 10%.

The camera is capable of surge protection however it is important to ensure the unit is grounded appropriately.

- **Do not disassemble the camera**

To prevent electric shock, do not remove screws or covers. There are no user serviceable parts inside.

- **Do not block cooling holes on the bracket**

This camera has a cooling fan inside. Blocking the cooling holes leads to build up of heat inside the camera and may cause a malfunction.

- **Do not operate the camera beyond the specified temperature, humidity or power source ratings**

Use the camera under conditions where temperature is between -40°C ~ 50°C (-40°F ~ 122°F), and relative humidity is below 90%.

- **Do not expose the camera to rain or moisture, or operate it in wet areas**

This product is designed for indoor use or locations where it is protected from rain and moisture. Turn the power off immediately if the camera is wet and consult with your dealer or other technical staff for assistance. Excessive moisture can damage the camera and also create the danger of electric shock.

- **Do not use strong or abrasive detergents when cleaning the camera body**

Use a dry cloth to clean the camera when it is dirty. In case the dirt is hard to remove, use a mild detergent and wipe the camera gently.

- **Never face the camera directly towards the sun**

Do not aim the camera at extremely bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects to avoid damaging the sensitive image sensor.

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1. Introduction

The Pro Series Outdoor PTZ Camera is designed to deliver superb performance and durability with an intelligent and stylish housing that is suitable in any security and surveillance installation.

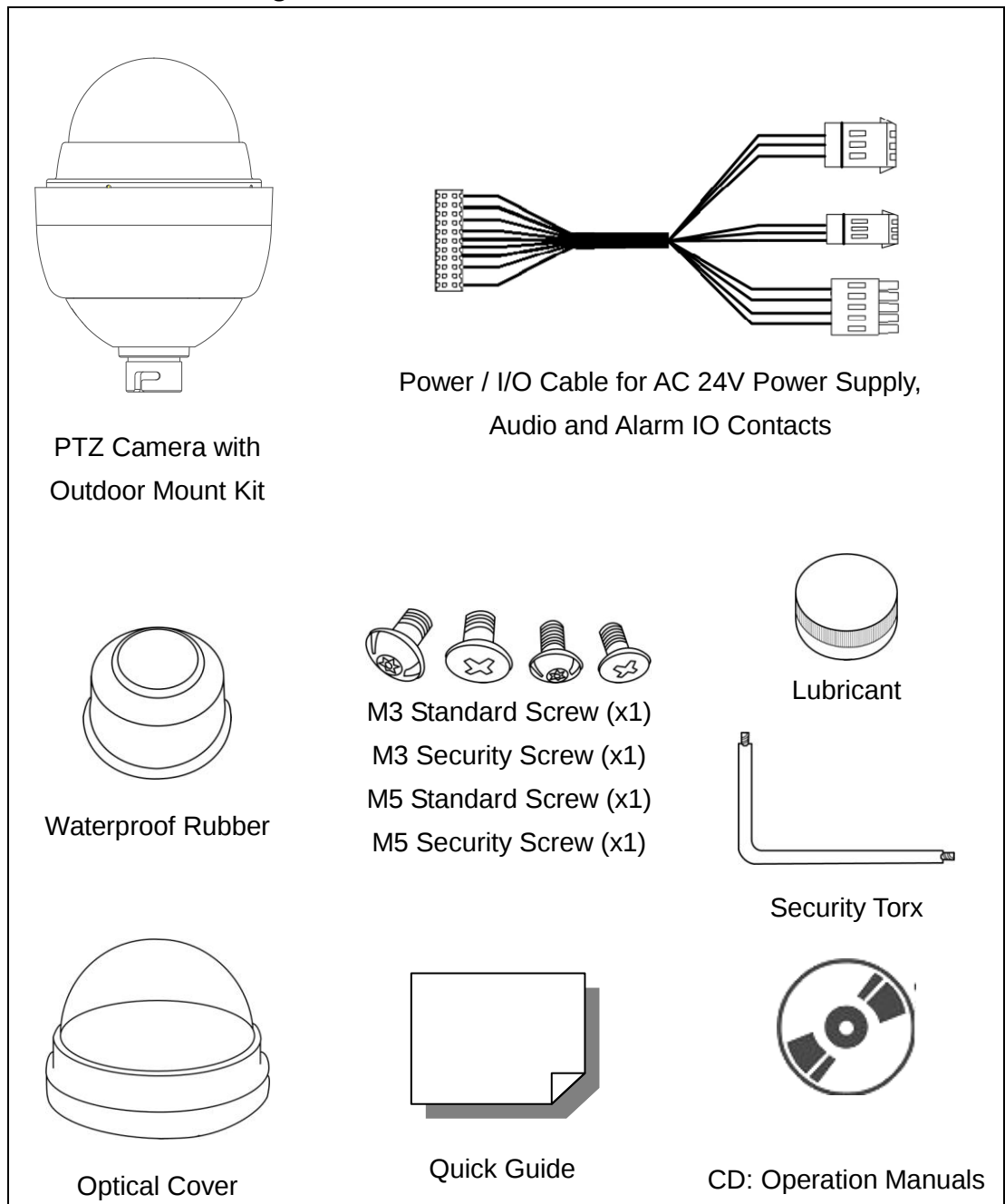
The Pro Series PTZ Camera is designed for outdoor installation and is IP66 / NEMA 4 rated.



2. Standard Package Content

Before proceeding, please check the box contains the items listed here. If any item is missing or has defects, DO NOT install or operate the product and contact your dealer for assistance.

PTZ Camera Package



3. Camera Setups and Cable Connection

Before installing or connecting the PTZ Camera, please refer to this section and complete preparations for PTZ Camera setups and various switch settings.

3.1 Preparations for PTZ Camera Setups

The following installation procedure is for the outdoor PTZ Camera equipped with the sunshield housing. Please follow the steps below to complete PTZ Camera's housing installation.

STEP 1

Unpack the PTZ Camera's package and take out the PTZ Camera unit.



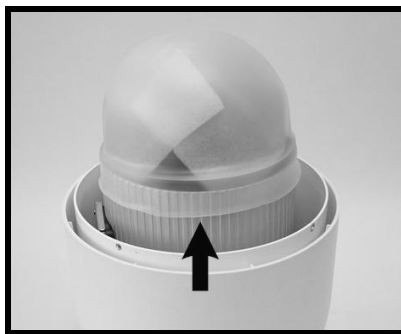
STEP 2

Rotate the top holder and remove it from the camera body.



STEP 3

Remove the protective cover and foam sheet.



STEP 4

Attach the dome cover to the camera body. Before doing so, apply some of the supplied lubricant on the cover's water-proof rubber to make the installation process smoother.

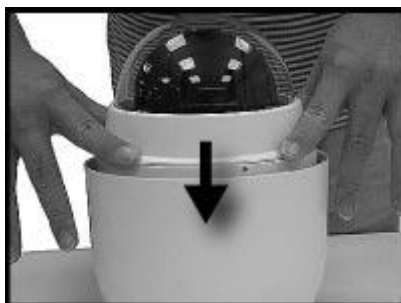


Note that the tiny protrusion on the cover must align with one of the four holes on the camera body.



STEP 5

Gently press down the dome cover with two hands on the side of it.



DO NOT press the cover, as shown in the figure; this might cause damage to the PTZ Camera.



STEP 6

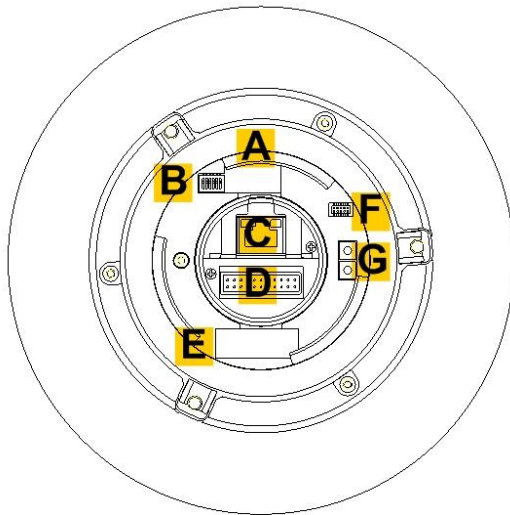
Use the provided screws to attach the dome cover to the camera body.

**STEP 7**

Set the switches located on the top of the PTZ Camera. Refer to section [3.2 PTZ Camera Setups](#) for detailed information about various switch settings.

3.2 Switch/Connector Definition

Located on the top of the camera are the Network RJ-45 and 22-pin Power / I/O Cable connections. There are also the camera Reset Buttons and service switches. Please refer to the diagrams and tables accompanied with for use of each switch/connector.



- | | |
|----------|-------------------|
| A | None |
| B | Service Switch |
| C | RJ-45 Connector |
| D | 22-Pin Connector |
| E | None |
| F | Service Connector |
| G | Reset Buttons |

3.2.2 Service Switches

The PTZ Camera's Service switches are specified in the table below. Each switch's default setting is shown as the figure below. DO NOT change the default setting, or some functions may not work properly.

Communication Switch ON 1 2 3 4 5 6	SW 1	Must Be OFF
	SW 2	
	SW 3	Must Be OFF
	SW 4	Must Be OFF
	SW 5	System Initialization
	SW 6	Reserved

Factory Default: Turning on SW 5 before power is applied will restore the camera to the factory default status. Be sure to reset the switch back to OFF or the PTZ will not function properly.

3.3.1 Cable Requirements

The Pro Series Outdoor PTZ Cameras require Cables as described below:

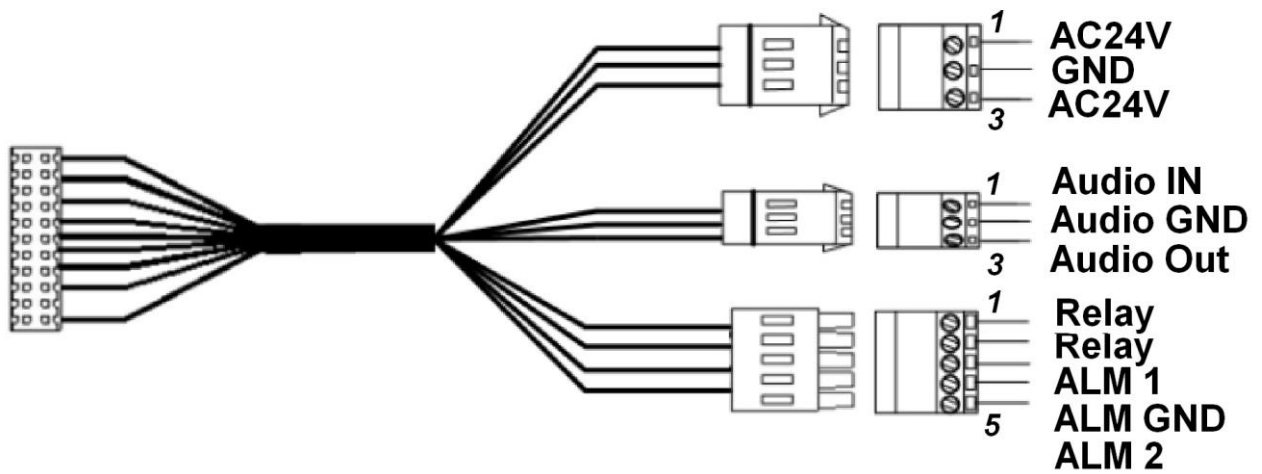
- The RJ-45 connected CAT5 cable provides all network connectivity.
- The 22-pin connected cable provides 24VAC power as well as external Audio and Alarm connectivity.



NOTE: Ensure the connected power supply provides 24VAC +/-10%.

POE+ Operation: Installations in warm environments where the temperatures do not regularly go **below freezing** do not require the 24VAC heater to operate. In these installations where the heaters are not required, the Pro Series Outdoor PTZ can operate from POE+ (802.3AT). When operating from POE+ on the Cat5 cable and there are no external Alarm I/O or audio connections required, the 22-pin cable is not required. The 22-pin cable is used only for 24VAC or external alarms or audio.

3.3.2 22-Pin Data Cable



3.3.6 Ethernet Cable Connection

Connect one end of the CAT 5 Ethernet cable to the RJ-45 connector of the IP PTZ Camera, and the other end of the cable to the network switch or PC.



NOTE: In some cases, you may need use an Ethernet crossover cable when connecting the IP PTZ Camera directly to the PC.

4. Networking Settings

4.1. Configurator Utility

Upon receiving Pro Series camera, its basic parameters, such as the IP address, need to be configured using the “Unified Configurator” utility which is provided on the CD. The unified Configurator is also accessible from the Latitude AdminCenter under the Applications tab.

On the provided CD the Device Configurator is an executable file that is compressed in a .rar file along with 4 other files,

Once you extract all the files contained in the .rar file to the hard disk of your computer, and open the *Device Configurator* executable file, the application is ready to use.

4.1.1. Configuring the Pro Series Network Parameters

When installing Pro Series cameras, you may have to change their IP address to ensure the compatibility with an existing network. The default IP address of the Pro Series camera is created using the APIPA addressing scheme based on each camera’s unique MAC address. When resetting the Pro Series camera to the factory default values, the IP will change back to the address created by the APIPA.

Each Pro Series camera that resides on the same network must have a unique IP address.

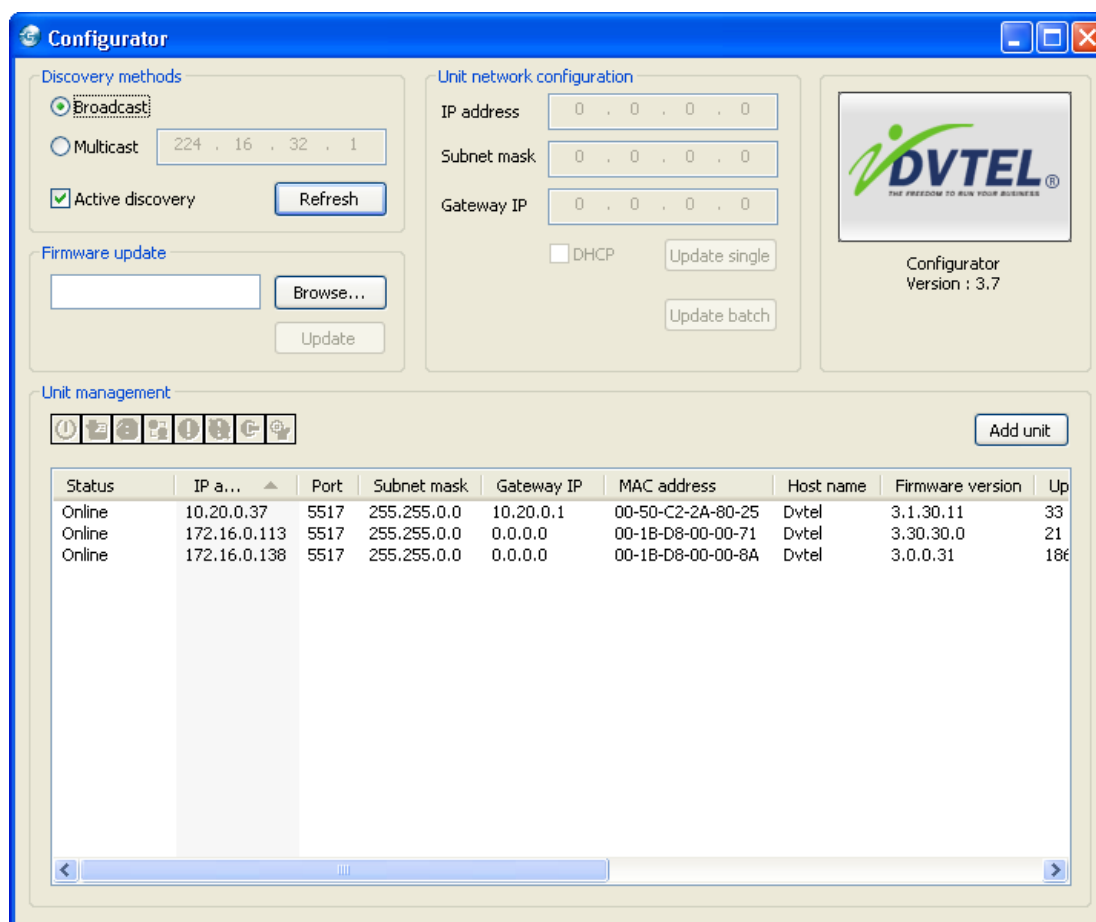
4.1.2. To set the parameters of a Pro Series camera

Make sure the camera is powered on and that both the camera and computer are connected to the same network. Note: If connecting the camera directly to the computer networking port it will be necessary to use a “crossover” type network cable.

For more detailed information and illustrations, see the relevant *Quick Installation Guide*.

1. Start the *Device Configurator* by double-clicking the *Configurator.exe* file or the Unified Configurator and selecting “Pro Line A”.

The *Device Configurator* appears.



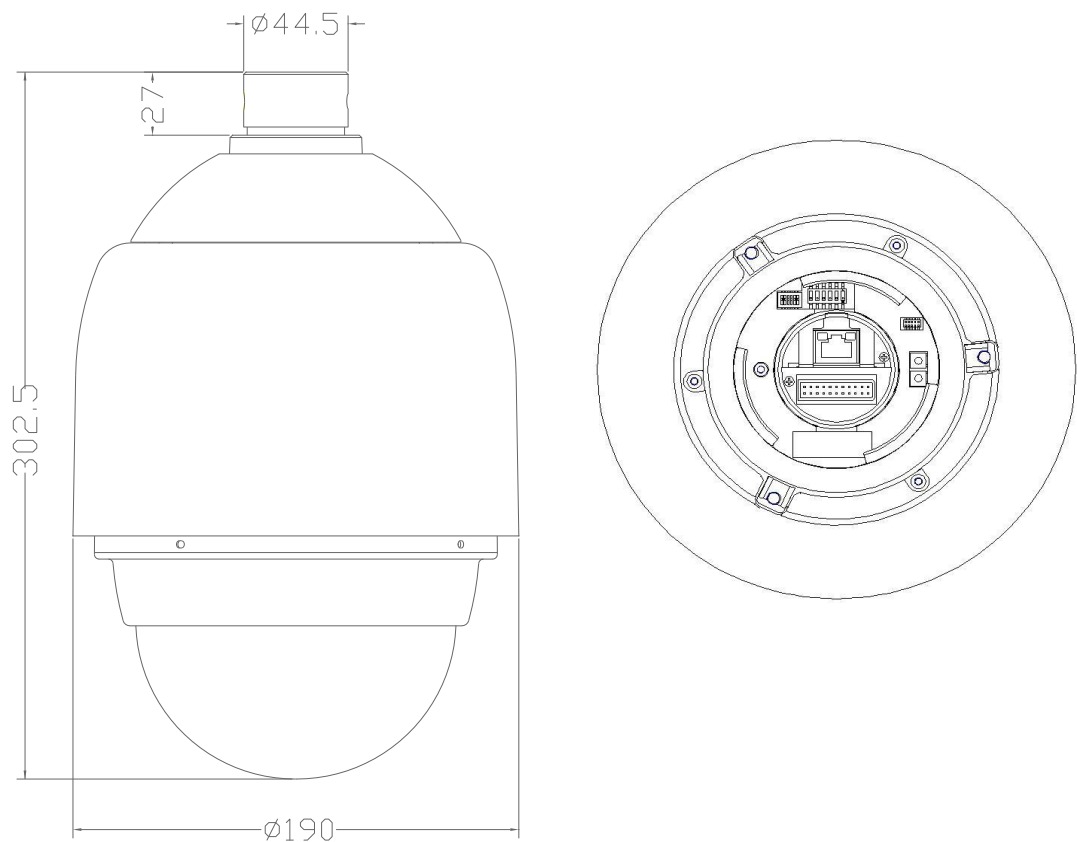
2. Once the *Device Configurator* appears, the Discovery process starts automatically.
3. The discovered Pro Series cameras appear in the *Unit Management* pane
4. In the *Unit Management* pane, select the desired Pro Series camera.
5. Once a Pro Series camera is selected, the Network configuration pane is enabled.
6. In the *IP address* field, enter the desired IP address of the Pro Series camera.
7. In the *Subnet Mask* field, enter the subnet mask of the Pro Series camera. If unsure of this setting using 255.255.255.0 works for most or consult with your network administrator.
8. In the Gateway IP field, enter the gateway IP address of the Pro Series camera. If not sure about this, leave the address set to 0.0.0.0 or consult your network administrator.
9. Click **Update**.
10. The Pro Series camera will reset and the new network configuration parameters will appear in the *Unit Management* pane. The initial configuration of the Pro Series camera is now complete. You can now add the camera to a Latitude NVMS system via the AdminCenter or access the camera's built in web interface or Telnet Command Line Interface.

5 PTZ Camera Installation

Basing on user's installation environments, the PTZ Camera can be installed on ceiling, on wall or on pole. In the following section, various PTZ Camera's installation accessories, installation methods and installation procedures will be described in detail. In addition, the next section will provide the PTZ Camera's dimension for your reference before installation.

5.1 PTZ Camera Dimension

The diagrams below show detailed dimension for the camera's different parts.



5.2 Optional Accessories

PTZ Camera Accessories

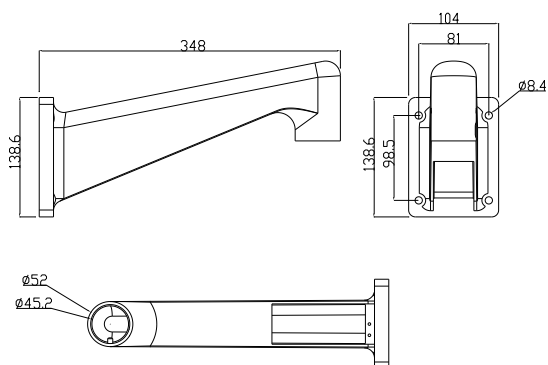
Optional Smoked Vandal Proof Cover



Mounting Accessories

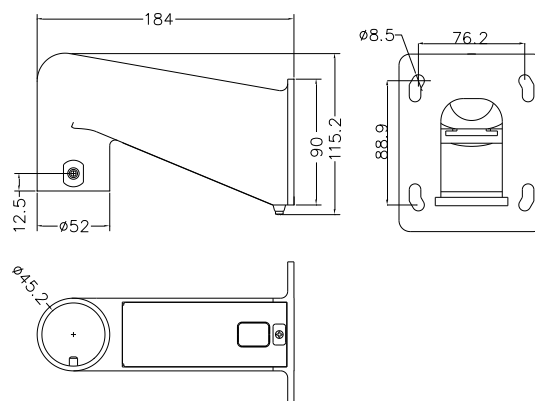
Long Arm Wall Mounting Option CX-ARMX-1

White; 348×104×138.6 mm (13.7×4.1×5.5 inches); 1.5 kg (3.3 lbs); Diameter: 45 mm (1.8 inches). Supplied with rubber washer-8×1, pendent tube washer×1, spring washer-8×1 and M8*12 screw×1.



Short Arm Wall Mount option CX-ARMX-0

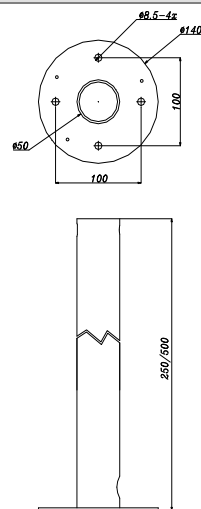
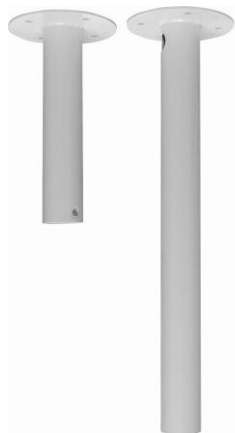
184×104×115.2 mm (7.24×4.09×4.54 inches); 0.6 kg (1.2 lbs)
Supplied with rubber washer-8×1, pendent tube washer×1, spring washer-8×1 and M8*12 screw×1.



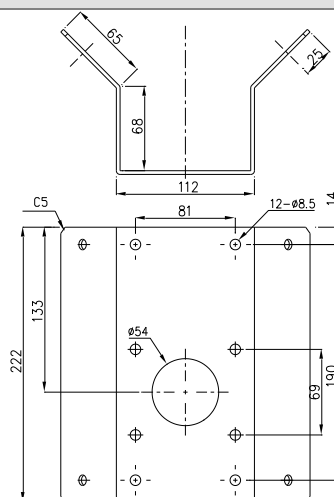
Short (CX-PIPE-1) or Long (CX-PIPE-2) Pendant Mounting Straight Tube

Iron, Height: 250/500 mm (9.8/19.7 inches), Diameter: 50 mm (2 inches)

1 kg (2.2 lbs) / 1.8 kg (4 lbs), Supplied with rubber washer-8×1, pendent tube washer×1, spring washer-8×1 and M8*12 screw×1.

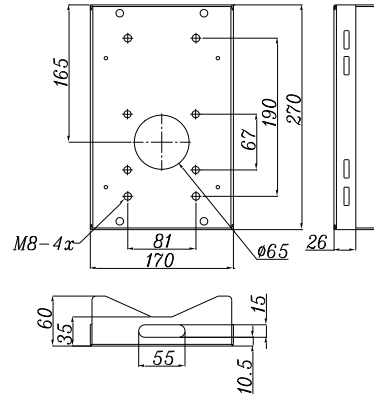
**Corner Box Mounting CX-CNBX-0**

222(L)×204(W)×117(D) mm (8.7×8×4.6 inches); 2 kg (4.4 lbs); Supplied with washer-8×4, spring washer×4, M8*16 screw×4, M8 nut×4.



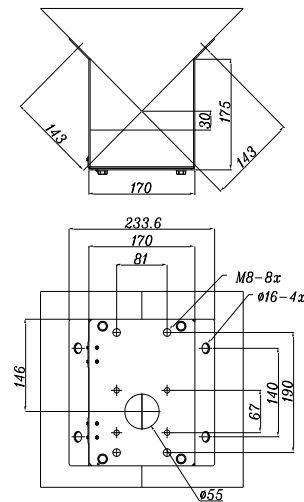
Pole Box Mounting CX-PLBX-0 Supplied with Stainless Steel Straps

270(L)×170(W)×60(D) mm (10.6×6.7×2.4 inches); Diameter: 112~130 mm (4.4~5 inches); 1 kg (2.2 lbs). Supplied with stainless steel straps×4, M8*16 screw×4, washer×4, spring washer×4



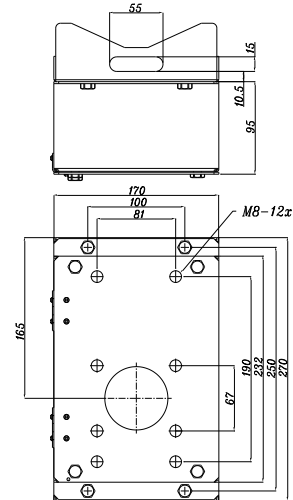
Corner Box Mounting CX-CNBX-0

232(L)×234(W)×210(D) mm (9.1×9.2×8.3 inches); 2.7 kg (6 lbs); Supplied with washer×4, M8*16 screw×4 and spring washer×4.
Power Box can be set inside the wide box.



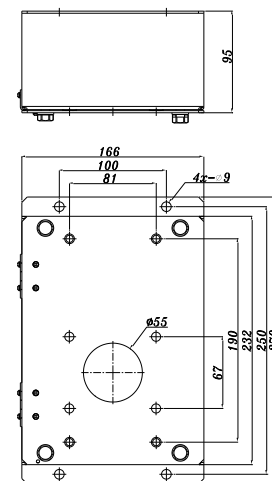
Pole Box Mounting CX-PLBX-0 Supplied with Stainless Steel Straps

270(L)×166(W)×155(D) mm (10.6×6.5×6.1 inches); 3.2 kg (7.1 lbs); Supplied with M8*16 screw×4, washer×4, spring washer×4, stainless steel straps×4.
Power Box can be set inside the wide box.



Wall Box Mounting CX-WLBX-0

270(L)×166(W)×95(D) mm (10.6×6.5×3.7 inches); 2.2 kg (4.84 lbs); Supplied with M8*16 screw×4, washer×4, spring washer×4
Power Box can be set inside the wall box.



Stainless Steel Straps

For fixing Pole Direct Mounting/Pole Box on the pole.
Length: 700 mm (27.5 inches); Width: 0.63"; 0.02 kg (0.04 lbs)



All photos of the accessories are subject to change without notice.

5.3 Ceiling Mounting with Straight Tube

The Straight Tube is available in 2 lengths: 25 cm and 50 cm.

Items Needed:

- PTZ Camera with Pendant / Bracket compatibility Kit
- Power / I/O Cable (supplied)
- Ethernet Cable
- Straight Tube and equipped items (optional accessory)
- Waterproof Rubber (supplied)
- M5 Standard/Security Screw (supplied)
- Screws and Screw Anchors for fixing the Straight Tube onto the ceiling (not supplied)

Tools Needed:

- Drill
- Screwdrivers

Follow the steps to mount the PTZ Camera with the Straight Tube.

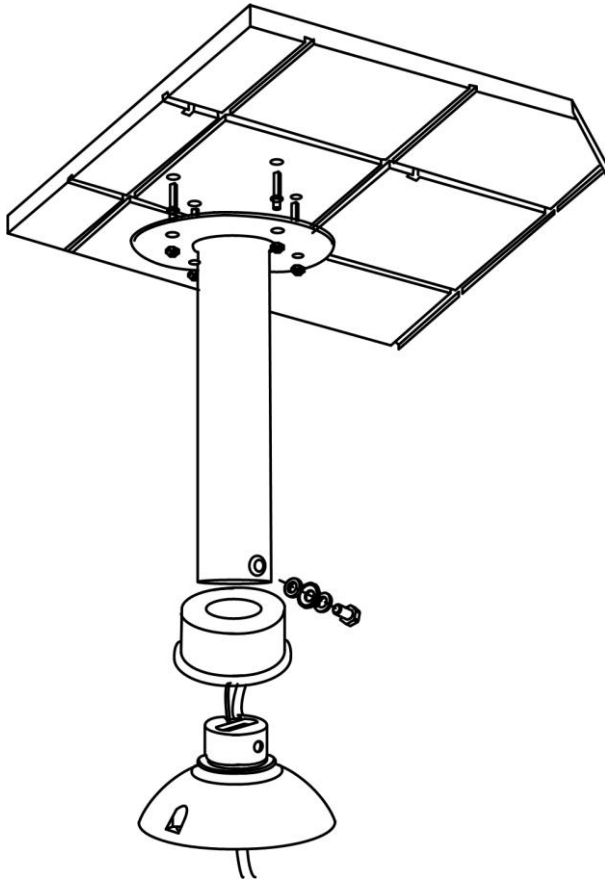
- 1) Ensure that the mounting surface can support the weight of the PTZ Camera and Straight Tube.
- 2) Make a cable entry hole on the ceiling.
- 3) Fix the Straight Tube to the ceiling with proper screws and screw anchors.
- 4) Attach the Waterproof Rubber to the Straight Tube.
- 5) Run the cable(s) through the Straight Tube with the Network and Power / I/O Cable's 22-pin cable coming out of the outlet.



NOTE : After running the cable(s) through the Straight Tube, please block the tube's outlet with the supplied sponge to avoid insects entering the tube.

- 6) Thread the cable(s) through the provided Pendant Mount Kit and join the Pendant Mount Kit to the Straight Tube with the supplied screws and washers. Then adjust the Waterproof Rubber to completely cover the joint.
- 7) Connect the cable(s) to the PTZ Camera.
- 8) Join the PTZ Camera to the Pendant Mount Kit with the supplied M5 screw and washers.

Ceiling Mount: Straight Tube + Pendant Mount Kit



5.4 Short & Long Arm Wall Mount

Items Needed:

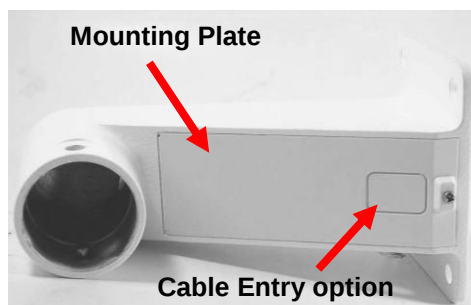
- PTZ Camera with supplied Pendant / Bracket compatibility Kit
- Power / I/O Cable (supplied)
- Ethernet Cable
- Data Cable (supplied)
- Short or Long Arm Mount and equipped items (optional accessory)
- Waterproof Rubber (supplied)
- M5 Standard/Security Screw (supplied)
- Screws and Screw Anchors for fixing the Arm Mount (not supplied)

Tools Needed:

- Drill
- Screwdrivers
- Adjustable Wrench

Follow the steps below to mount the PTZ Camera with the Arm Mount.

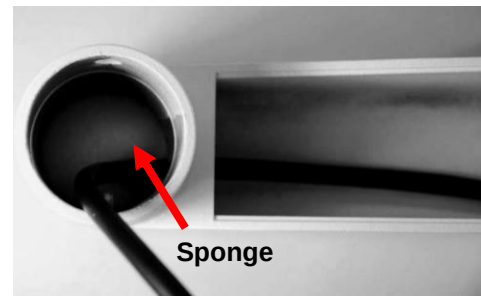
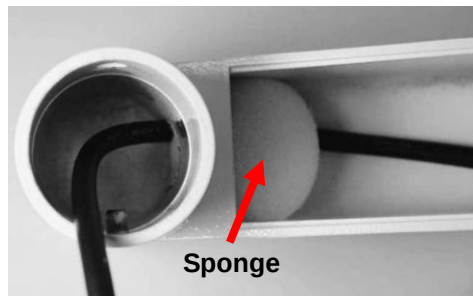
- 1) Make a cable entry hole on the wall to recess the cables. Otherwise, users could push up the Cable Entry on the Arm Mount's mounting plate to place the cables, as shown in the photo below.



- 2) Fix the Arm Mount on the wall with proper screws and screw anchors.
- 3) Attach the Waterproof Rubber to the Arm Mount.
- 4) Run the cable(s) through the Arm Mount with the Data Cable's 22-pin cable coming out of the outlet.

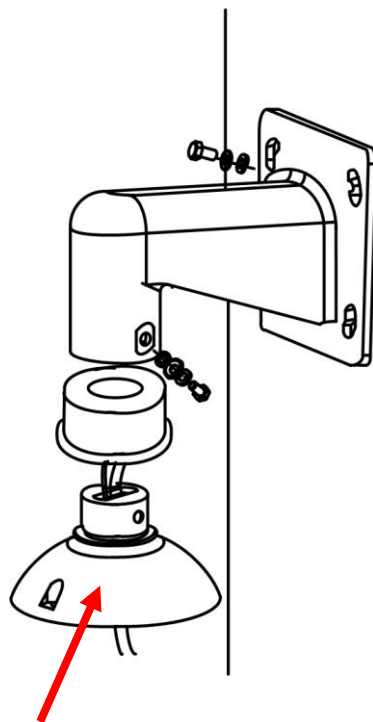


NOTE: Please block the cable entry hole with the supplied sponge to avoid insects entering the Arm Mount. The sponge can be placed in two ways as shown in the illustrations below.



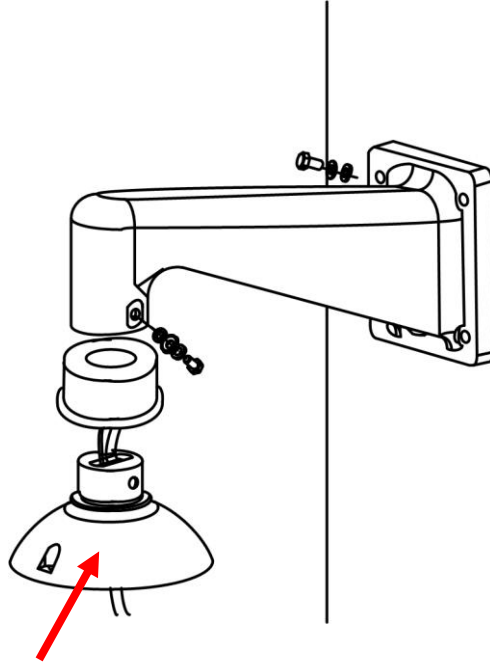
- 5) Thread the cable(s) through the Pendant Mount Kit and join the Pendant Mount Kit to the Arm Mount with the supplied screws and washers. Then adjust the Waterproof Rubber to the joint.
- 6) Connect the cable(s) to the PTZ Camera.
- 7) Join the PTZ Camera to the Pendant Mount Kit with the supplied M5 screw and washers.

Wall Mounting: Short Arm Mount + Outdoor Pendant Mount Kit



Pendant Mount Cap supplied with the Outdoor PTZ Camera

Wall Mounting: Long Arm Mount + Outdoor Pendant Mount Kit



Pendant Mount Cap supplied with the Outdoor PTZ Camera

5.5 Wall Box Mounting

Items Needed:

- PTZ Camera with supplied Pendant / Bracket compatibility Cap
- Accessory Cable (supplied)
- Ethernet Cable
- Long/Short Arm Mount and equipped items (optional accessory)
- Wall Box Mounting (optional accessory)
- Waterproof Rubber Cover - Supplied
- Screws and Screw Anchors for securing the Wall Box Mounting onto the wall (not supplied)

Tools Needed:

- Drill
- Screwdrivers

Follow the steps to mount the PTZ Camera with the Long/Short Arm Mount and Wall Box Mounting.

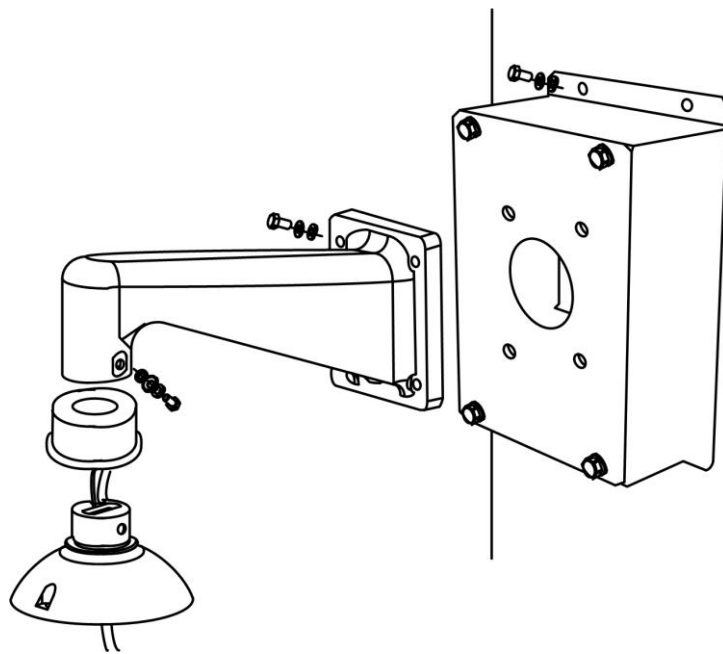
- 1) Make a cable entry hole on the wall to recess the cable(s).
- 2) Fix the Wall Box Mounting on the wall with proper screws and screw anchors. Then run the cable(s) through the hole on the Wall Box Mounting with the Network and Accessory Cable's 22-pin cable if used coming out.
- 3) Fasten the Long/Short Arm Mount onto the Wall Box Mounting with the supplied screws and washers. Then thread the cable(s) through the Long/Short Arm Mount with the cable(s) coming out of the Mount's outlet.



NOTE: Please block the cable entry hole with the supplied sponge to avoid insects entering the Mount. See the illustrations in section [4.4.1 Short/Long Arm Mount](#) > Step 4.

- 4) Attach the Rubber Cover to the Long/Short Arm Mount.
- 5) Thread the cable(s) through the Pendant Cap and join the Pendant Cap to the Long/Short Arm Mount with the supplied screws and washers. Then adjust the Rubber Cover to the joint.
- 6) Connect the cable(s) to the PTZ Camera.
- 7) Join the PTZ Camera to the Pendant Cap with the supplied screw and washers.

Wall Box Mounting: Wall Box Mounting + Short / Long Arm Mount + Pendant
Mount Cap



5.6 Corner Mount

Items Needed:

- PTZ Camera with supplied Pendant / Bracket compatibility Kit
- Accessory Cable (supplied)
- Ethernet Cable (
- Long/Short Arm Mount and equipped items (optional accessory)
- Corner Mounting Bracket (optional accessory)
- Waterproof Rubber Cover - Supplied
- Screws and Screw Anchors for fixing the Corner Mounting Bracket (not supplied)

Tools Needed:

- Drill
- Screwdrivers

Follow the steps below to mount the PTZ Camera with the Corner Mounting Bracket and Long/Short Arm Mount.

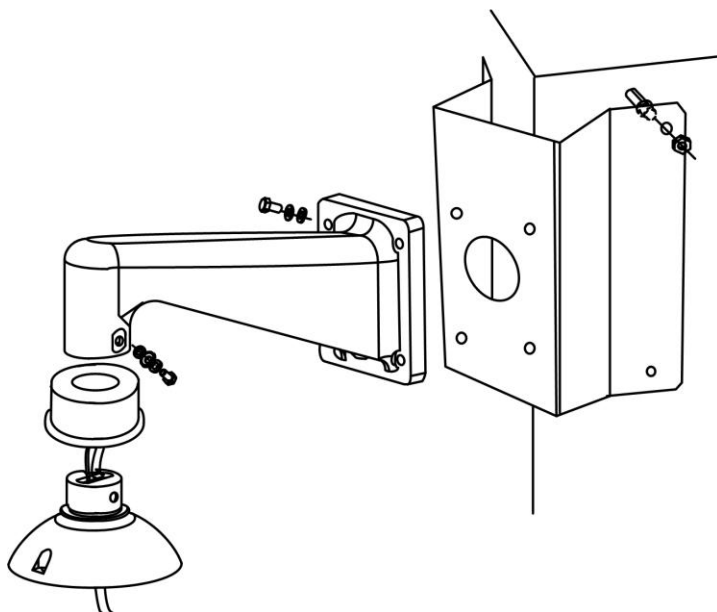
- 1) Make a cable entry hole on the wall to recess the cable(s).
- 2) Fix the Corner Mounting Bracket on the corner of the wall with proper screws and screw anchors. Then run the cable(s) through the hole on the Corner Mounting Bracket with the Network and Accessory Cable's 22-pin cable if used coming out.
- 3) Fasten the Long/Short Arm Mount onto the Corner Mounting Bracket with the supplied screws and washers. Then thread the cable(s) through the Long/Short Arm Mount with the cable(s) coming out of the Mount's outlet.



NOTE: Please block the cable entry hole with the supplied sponge to avoid insects entering the Mount. See the illustrations in section 4.4.1 Short/Long Arm Mount > Step 4.

- 4) Attach the Waterproof Rubber Cover to the Long/Short Arm Mount.
- 5) Thread the cable(s) through the Pendant Cap and join the Pendant Cap to the Long/Short Arm Mount with the supplied screws and washers. Then adjust the Waterproof Rubber Cover to the joint.
- 6) Connect the cable(s) to the PTZ Camera.
- 7) Join the PTZ Camera to the Pendant Cap with the supplied screw and washers.

Corner Wall Mounting: Corner Mounting Plate + Long/Short Arm Mount +
Pendant Cap



5.7 Corner Box Mounting

Items Needed:

- PTZ Camera with supplied Pendant / Bracket compatibility Cap
- Accessory Cable (supplied)
- Ethernet Cable (
- Long/Short Arm Mount and equipped items (optional accessory)
- Corner Box (optional accessory)
- Waterproof Rubber Cover - Supplied
- Screws and Screw Anchors for fixing the Corner Box (not supplied)

Tools Needed:

- Drill
- Screwdrivers

Follow the steps below to mount the PTZ Camera with the Corner Box and Long/Short Arm Mount.

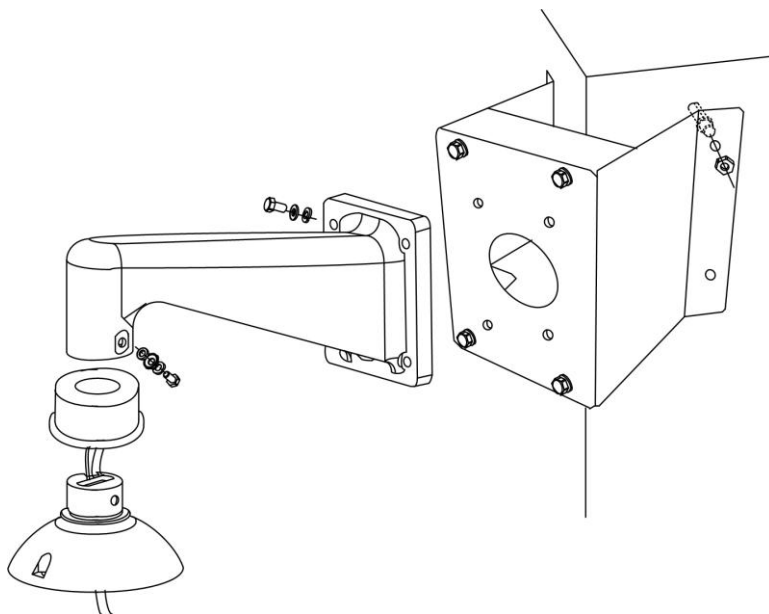
- 1) Make a cable entry hole on the wall to recess the cable(s).
- 2) Fix the Corner Box on the corner of the wall with proper screws and screw anchors. Then run the cable(s) through the hole on the Corner Mounting Bracket with the Network and Accessory Cable's 22-pin cable if used coming out.
- 3) Fasten the Long/Short Arm Mount onto the Corner Box with the supplied screws and washers. Then thread the cable(s) through the Long/Short Arm Mount with the cable(s) coming out of the Mount's outlet.



NOTE: Please block the cable entry hole with the supplied sponge to avoid insects entering the Mount. See the illustrations in section [4.4.1 Short/Long Arm Mount](#) > Step 4.

- 4) Attach the Waterproof Rubber Cover to the Long/Short Arm Mount.
- 5) Thread the cable(s) through the Pendant Cap and join the Pendant Cap to the Long/Short Arm Mount with the supplied screws and washers. Then adjust the Rubber Cover to the joint.
- 6) Connect the cable(s) to the PTZ Camera.
- 7) Join the PTZ Camera to the Pendant Cap with the supplied screw and washers.

Corner Box Mounting: Corner Box + Long/Short Arm Mount + Pendant Cap



5.8 Pole Mount

Items Needed:

- PTZ Camera
- Data Cable (supplied)
- Ethernet Cable
- Short or Long Arm Mount and equipped items (optional accessory)
- Pole Mount (optional accessory)
- Waterproof Rubber (supplied)
- M5 Standard/Security Screw (supplied)
- Stainless Steel Straps for fixing Pole Mounting

Tools Needed:

- Stainless Strap Cutter
- Screw Drivers

Follow the steps below to mount the PTZ Camera with the Pole Mounting and Long/Short Arm Mount.

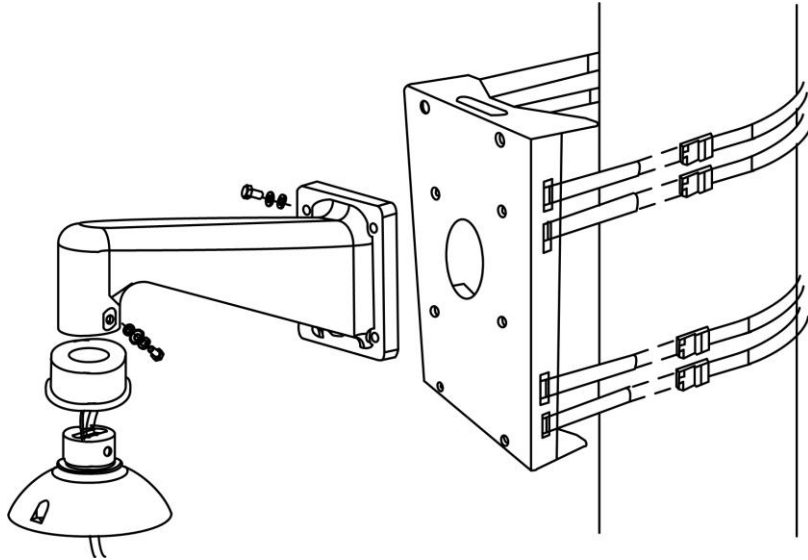
- 1) Fasten the Pole Mounting on a pole with equipped stainless straps.
- 2) Run the cable(s) through the hole on the Pole Mounting with the Network and Accessory Cable's 22-pin cable if used coming out.
- 3) Fasten the Long/Short Arm Mount onto the Pole Mounting with the supplied screws and washers. Then thread the cable(s) through the Long/Short Arm Mount with the cable(s) coming out of the Mount's outlet.



NOTE: Please block the cable entry hole with the supplied sponge to avoid insects entering the Mount. See the illustrations in section [4.4.1 Short/Long Arm Mount](#) > Step 4.

- 4) Attach the Rubber Cover to the Long/Short Arm Mount.
- 5) Thread the cable(s) through the Pendant Cap and join the Pendant Cap to the Long/Short Arm Mount with the supplied screws and washers. Then adjust the Rubber Cover to the joint.
- 6) Connect the cable(s) to the PTZ Camera.
- 7) Join the PTZ Camera to the Pendant Cap with the supplied screw and washers.

Pole Mounting: Pole Mounting + Long/Short Arm Mount + Pendant Cap



5.9 Pole Box Mounting

Items Needed:

- PTZ Camera
- Data Cable (supplied)
- Ethernet Cable
- Short or Long Arm Mount and equipped items (optional accessory)
- Pole Box Mounting (optional accessory)
- Waterproof Rubber (supplied)
- M5 Standard/Security Screw (supplied)
- Stainless Steel Straps for fixing the Pole Box Mounting

Tools Needed:

- Stainless Strap Cutter
- Screwdrivers

Follow the steps below to mount the PTZ Camera with the Pole Box and Long/Short Arm Mount.

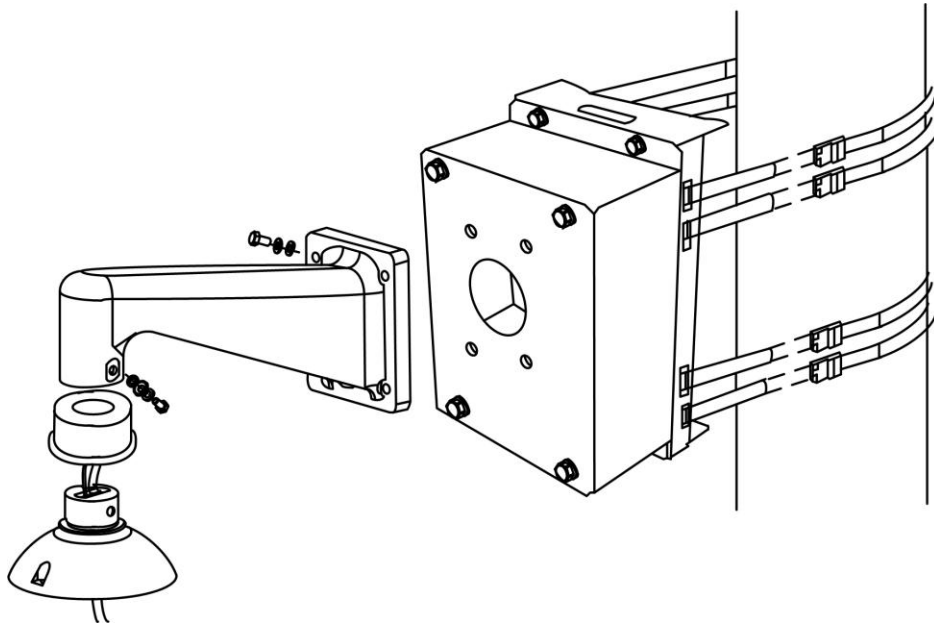
- 1) Fasten the Pole Box on a pole with equipped stainless straps.
- 2) Run the cable(s) through the hole on the Pole Box Mounting with the Network and Accessory Cable's 22-pin cable if used coming out.
- 3) Fasten the Long/Short Arm Mount onto the Pole Box Mounting with the supplied screws and washers. Then thread the cable(s) through the Long/Short Arm Mount with the cable(s) coming out of the Mount's outlet.



NOTE: Please block the cable entry hole with the supplied sponge to avoid insects entering the Mount. See the illustrations in section [4.4.1 Short/Long Arm Mount](#) > Step 4.

- 4) Attach the Waterproof Rubber Cover to the Long/Short Arm Mount.
- 5) Thread the cable(s) through the Pendant Cap and join the Pendant Cap to the Long/Short Arm Mount with the supplied screws and washers. Then adjust the Rubber Cover to the joint.
- 6) Connect the cable(s) to the PTZ Camera.
- 7) Join the PTZ Camera to the Pendant Cap with the supplied screw and washers.

Pole Box Mounting: Pole Box + Long/Short Arm Mount + Pendant Cap



PTZ User Guide

Latitude Camera Configuration

This chapter contains the configuration procedures conducted via the Latitude NVMS. The camera requires an IP address be set using the Configurator Utility prior to adding the camera to the Latitude System. Once the camera has the desired network settings, proceed with the following.

Adding a camera

To add a camera, perform one of the following options:

- Use the Camera wizard. This option is advisable when multiple cameras are added. The camera wizard will walk you step by step through the camera configuration procedure. To access the Camera wizard, right-click the Wizards button on the Sidebar, and select Camera Wizard.
- Access the Discovery tab by clicking Discovery on the Sidebar. The discovered camera(s) then have to be configured in the various tabs listed below. For more information, see the Online Help. This option can be used for the addition of single or multiple units.
- Add a camera manually directly to the desired Video Recording Archiver. Access the Physical View by clicking Physical View on the Sidebar. Right-click the desired Archiver, and select Add Unit manually. Define the unit type and necessary parameters. This option is only advisable for a single or a small number of cameras.

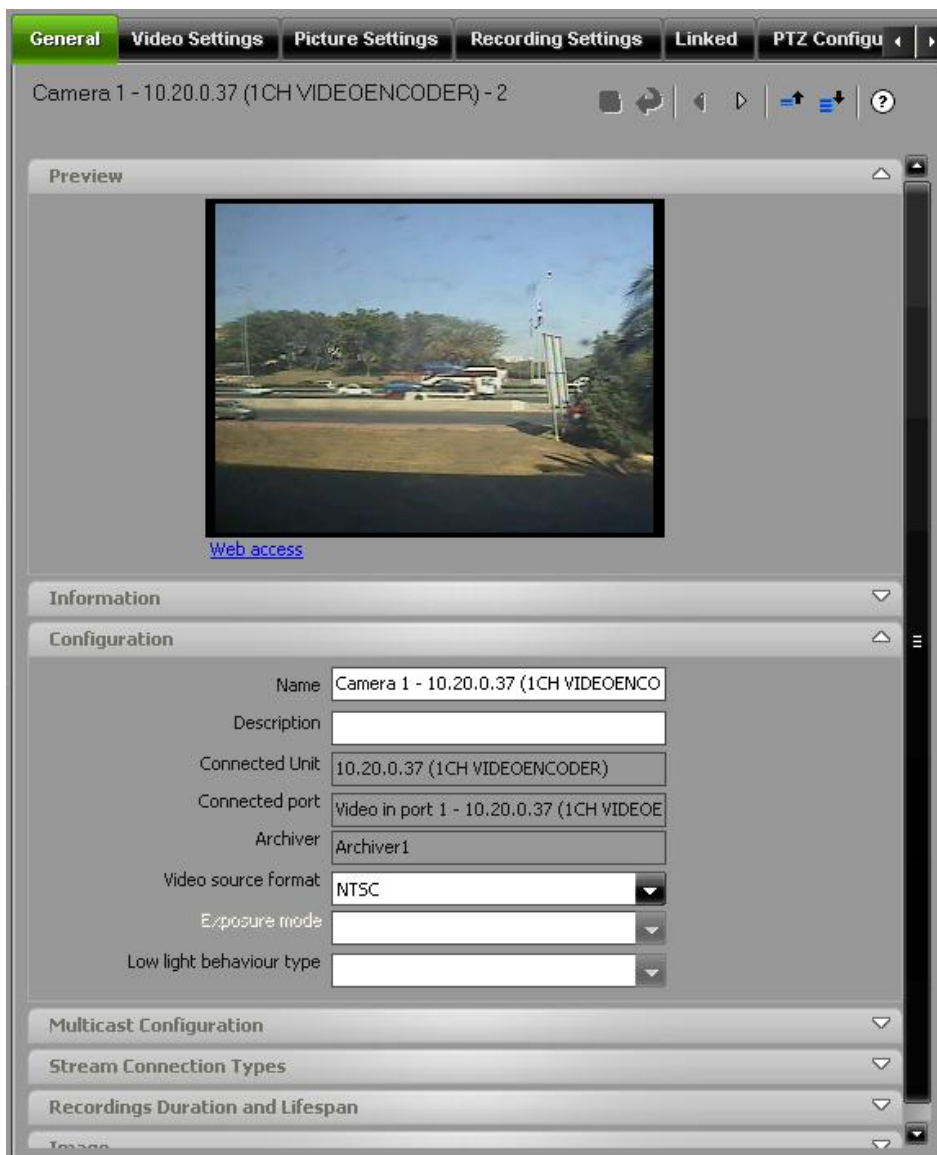
For more information, see the Online Help.

Accessing the Camera in Latitude

- Click **Video** on the Sidebar, and then find the camera you would like to configure in the logical tree and select it.

Configuring General Camera Settings

Configure the following parameters In the *General* tab:

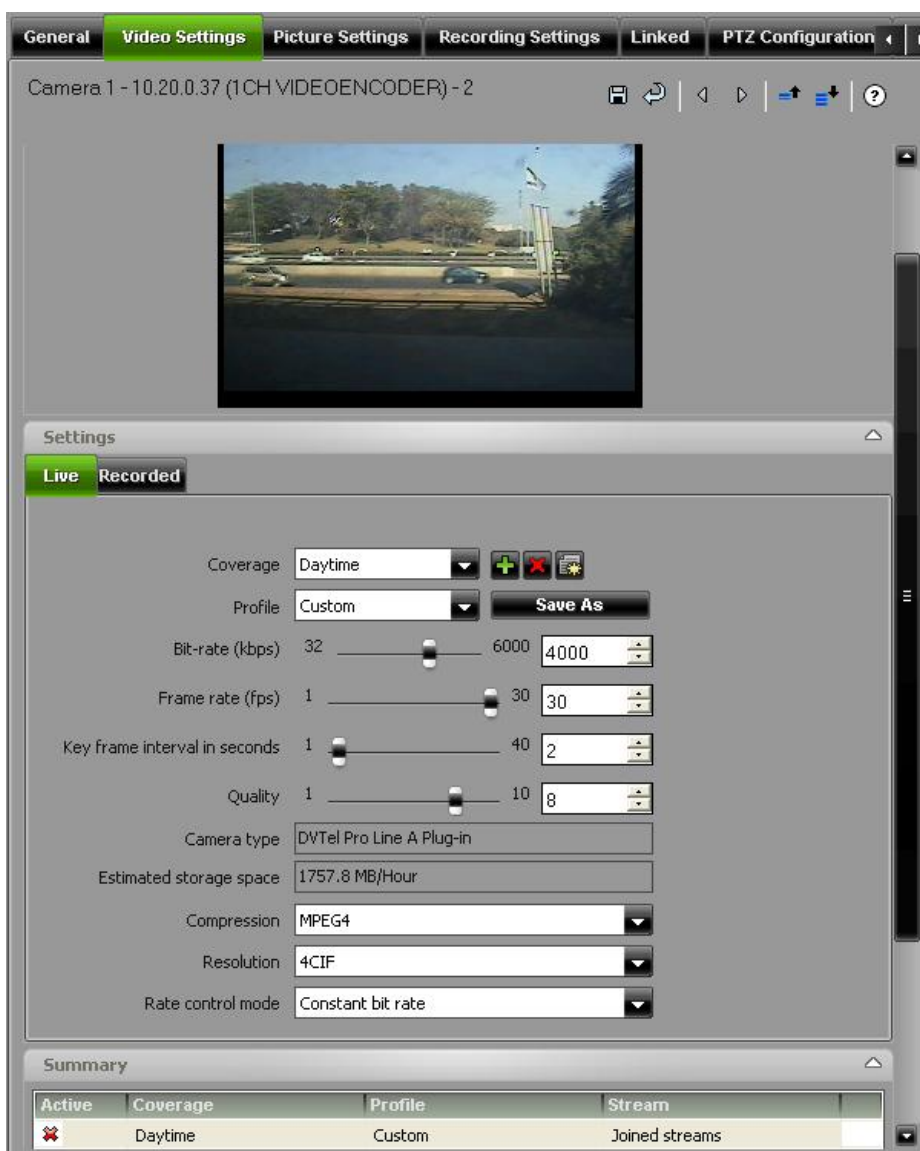


1. Give your camera a meaningful Name.
2. Check or set the **Video source format** to the correct format (NTSC/PAL).
3. If your network does not fully support multicast, change the **Archiver live stream type**, **Archiver recording stream type** and the **Client connection type** settings accordingly (consult with your network administrator) in the *Stream Connection Type* pane.
4. In the *Recordings Duration and Lifespan* pane, configure the **Manual recording lifespan**, which controls how long unlocked clips remain stored, the **Manual recording duration**, which determines how long the camera is recorded when a user starts a manual recording session, the **Motion detection recording lifespan**, which controls how long clips containing motion detection remain stored, and **Redundant recording lifespan**, which controls how long clips from a redundant Archiver remain stored.

5. In the *Image* pane, **Image Rotation** and **Orientation** can be configured based upon the specific edge devices capabilities.
 6. Click the **Save** button to save your settings.
- For detailed information, see the Online Help.

Configuring Video Settings

1. Select the *Video Settings* tab. Here you can add Live and Recorded Video settings, which affect the quality of the video stream used for live and recorded display, such as frames per second (FPS) and resolution.



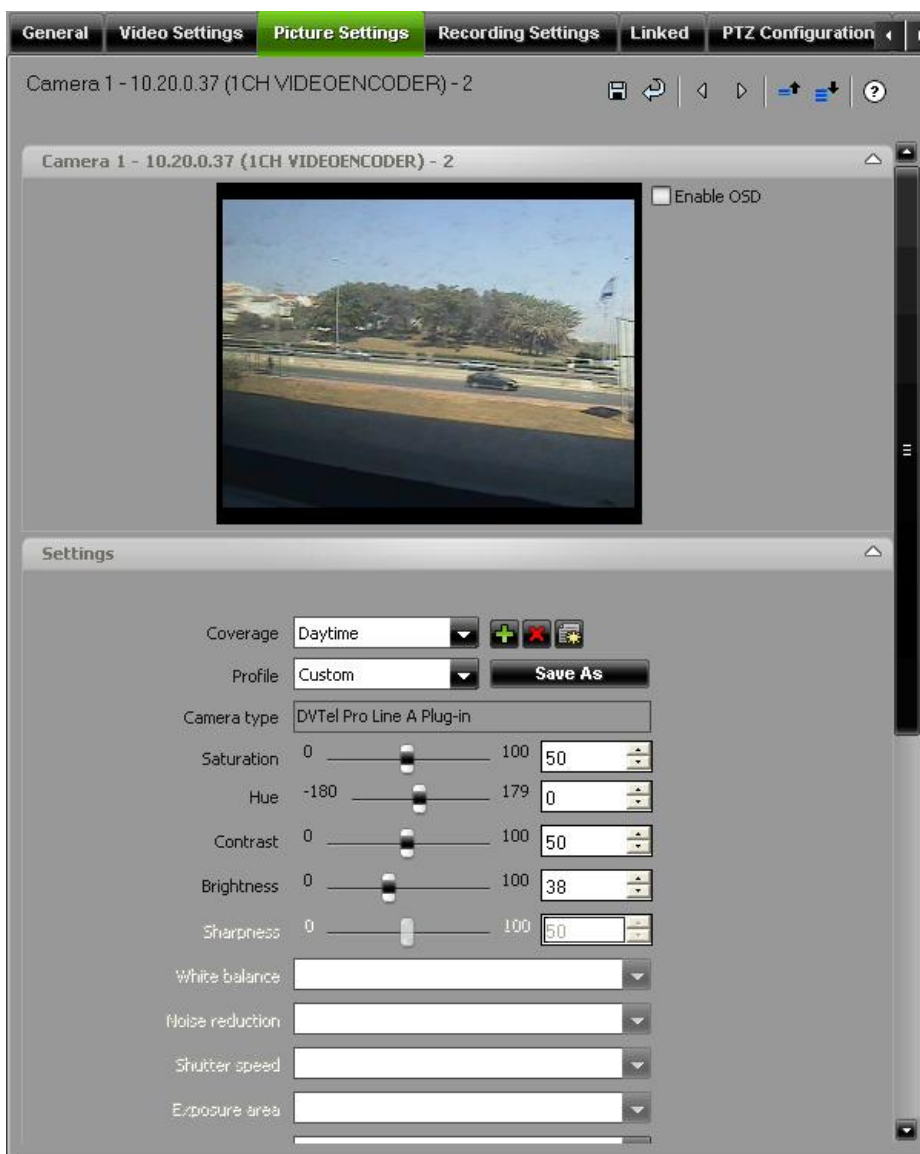
2. In the **Live** tab of the *Settings* pane, click next to the *Coverage* drop-down list to add the desired predefined coverage or create custom coverage settings.
3. You can select from either the pre-configured profiles from the *Profiles* drop-down list or create a custom profile.

4. Click the **Recording** tab of the *Settings* pane to configure the *Recorded Video* settings. Select the desired coverage and profile or define a custom profile.
5. To configure a dual-streaming device to use separate streams, clear the **Recorded quality same as live** check box. All fields of the *Recording* tab will be enabled.
6. Click the **Save** button to save your settings.

For detailed information, see the Online Help.

Configuring Picture Settings

1. Select the *Picture Settings* tab. The Picture parameters affect the image quality, such as brightness, contrast and so on.



2. Click  next to the *Coverage* drop-down list to add the desired predefined coverage or create custom coverage settings.

3. Select a predefined **Profile** from the *Profile* drop-down list (Normal, Dark or Bright).
Alternatively, select a Custom profile and define or adjust the desired Picture settings. This option is disabled if a predefined Profile setting was selected.
4. Click the **Save** button to save your settings.

For detailed information about the Picture Setting parameters, consult the Online file.

Configuring Recording Settings

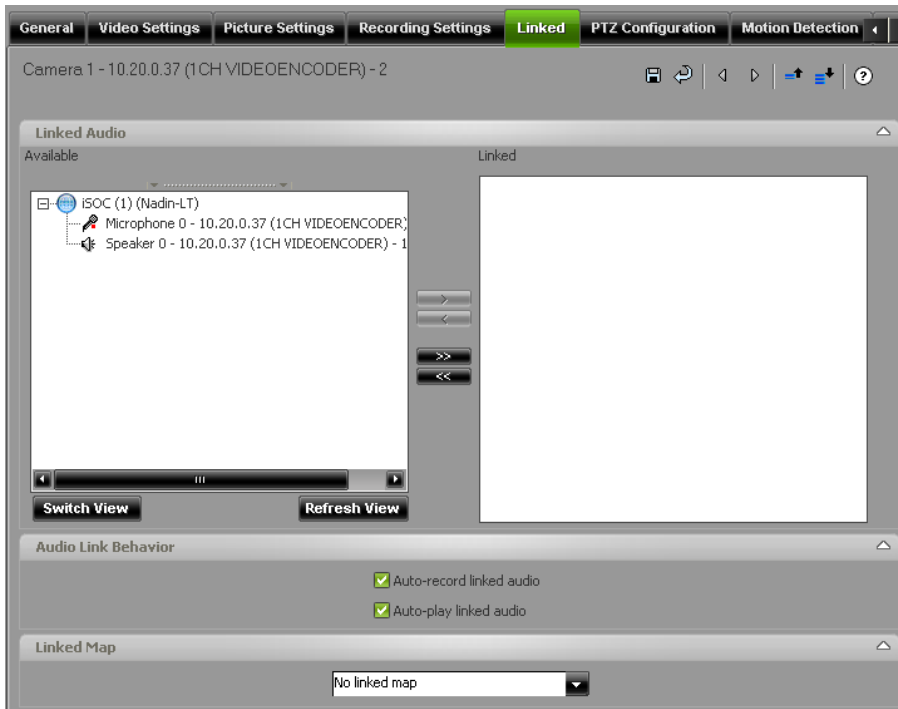
1. Select the *Recording Settings* tab to add Recording settings. Recorded Quality parameters affect the quality of the video stream used for recorded video display.



2. Recording settings may be applied in one of two ways: by attaching predefined coverage settings, or by creating custom coverage settings, which may utilize either predefined or custom profiles (along with predefined coverages).

Configuring Linked Entities

1. If applicable, select the Linked tab to associate the camera with speakers, microphones and/or maps.



The entities that are linked to the camera are automatically displayed/heard with the camera. For example, when a microphone is linked to a camera, it is possible to hear the audio along with the live or recorded video stream.

2. Click the **Save** button to save your settings.

PTZ Control

In Latitude, the PTZ protocol settings are automatically configured for best performance during the discovery process however you can check the data communication and protocol parameters for PTZ cameras using the PTZ Configuration tab of your camera. In addition, the tab contains a PTZ controller (identical to the one found in ControlCenter), which can be used to set presets and patterns; change iris, focus and speed settings; and access the camera's on-screen menu.

In the *Summary* pane, you can add PTZ schedules.

Using the PTZ Configuration Tab

1. Select the PTZ Configuration tab to configure the settings of your PTZ.



2. Select the **Enable PTZ functionality** check box if not already selected.
 3. The following are the Automatic default PTZ settings and should be used for most applications:
 1. PTZ Driver: DVTel IP PTZ - Series 2
 2. Mode: RS485 4-wire
 3. Connected Port: Leave at Default setting
 4. Serial Address: Set to 1
 5. Data bits: 8
 6. Parity: None
 7. Stop bits: 1
 8. Bit Rate: 4800
 4. Save any changed settings and try the PTZ control to verify the settings.
- You may also set desired presets and/or patterns and save your settings.

The Web Interface

The Built-in Web interface is useful during installation to view live video or control the basic PTZ functions. Most settings shown in the Web interface are actually configured using the Latitude AdminCenter Client application and in most cases changing the settings via the Web interface should only be done by or at the direction of qualified technical personnel. Improper changes in the web interface could affect the performance of the Latitude system or may render the camera unavailable to view or record important video.

Accessing the Web Interface

It is possible to access the web interface via the *Device Configurator* or directly via a web browser.

Note:

- *Only Internet Explorer is supported for accessing the Pro Series camera via the web.*
- *Upon first access, a prompt for ActiveX installation may appear to enable viewing of live video.*

To access the Built-in Pro Series Web interface

Via the Device Configurator

1. Open the *Device Configurator* by double-clicking its .exe file.
2. In the *Unit Management* pane, select the desired Pro Series camera.
3. Right-click the desired Pro Series camera, and then select **Web** or click  on the Unit management toolbar.

Via a web browser

1. Start the Internet Explorer.
2. In your Internet Explorer window, enter the IP address of the device using the *http://IP_address* format.

The web browser appears, displaying the home page of the Pro Series camera.

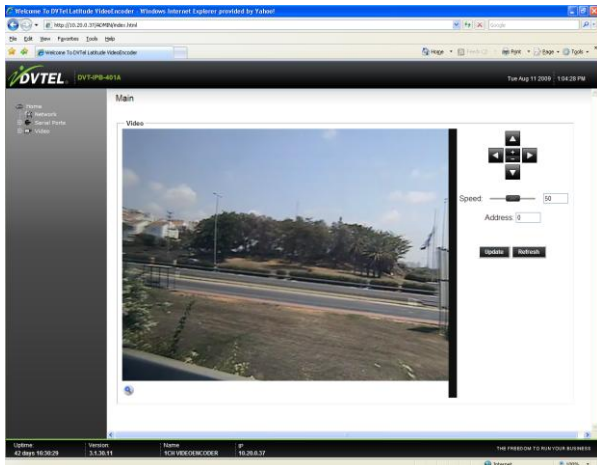


Figure 4: Web browser with Pro Series camera home page

Note:

You may need to lower the security level in your web browser to be able to install the ActiveX component. If the component is not installed, you will not see any video.

Using the Web Interface

Using the web interface, you can view live video and set general, network configuration and video configuration parameters of the displayed Pro Series camera.

Web Interface Workspace

The web interface consists of a navigation pane, video pane and configuration pane.

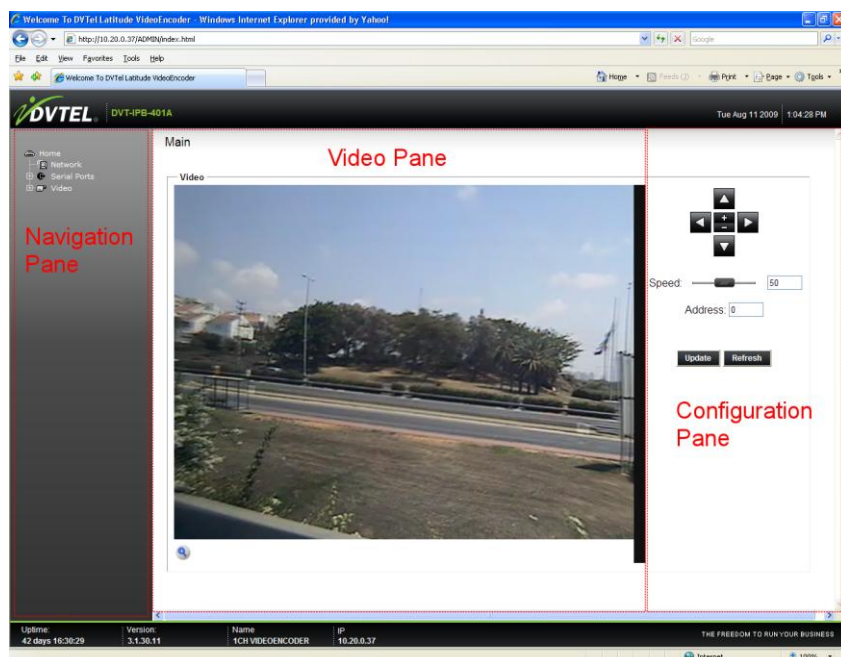


Figure 2: Web Interface Workspace

The following actions can be performed in the different panes:

- Navigation Pane — Access the Network Configuration and Video Configuration pages
- Video Pane — View live video
- Configuration Pane — Set the displayed parameters

Setting General Parameters

The Home page of the web interface displays the video feed and configurable general parameters of the Pro Series camera.

To set general parameters

1. On the Home page of the web interface, set the following parameters:

Table 1: General Parameters

Parameter	Description
-----------	-------------

Speed	The PTZ speed — only applicable for PTZ Cameras
Address	The address of the PTZ — only applicable for PTZ Cameras

- 1.
2. Click **Update** to change the parameters or **Reset** to return to the default values.

Using the Digital Zoom

NOTE: The Latitude ControlCenter client application supports digital zoom as well as digital pan & tilt. For most applications the digital zoom in the webpage should not be used.

On the web pages providing the live video feed — the Home page and the Picture Profile web page — it is possible to zoom in and view a selected area close up with a digital zoom.

To use the digital zoom

1. On the Home page or the Picture Profile web page of the web interface, click the Zoom button located underneath the video feed.

The *Zoom* dialog box appears.

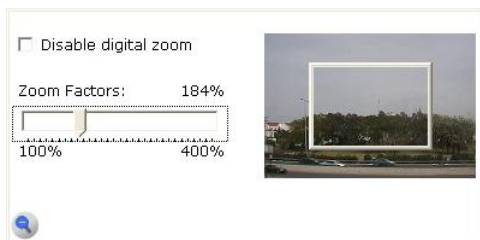


Figure 3: Digital Zoom dialog box

2. Clear the **Disable digital zoom** check box to enable the zoom.
3. Move the slider to the desired zoom level.
A frame appears in the video display, displaying the zoom area.
4. Using the cursor, move the frame to the desired area.
5. To disable the digital zoom, select the **Disable digital zoom** check box.
6. To close the *Digital Zoom* dialog box, click the Zoom toggle button.

Setting Network Configuration Parameters

The network configuration parameters of the Pro Series camera need to be set to ensure the compatibility with an existing network. The primary default IP address of the Pro Series camera is created using the APIPA addressing scheme and is in the range 176.(a+16).bc.de, based upon the hex to decimal conversion of the MAC address of the individual device: *nn-nn-nn-na-bc-de*.

To set the Network configuration parameters

1. On the Home page of the web interface, go to the *Navigation* pane.
2. Click the *Network* branch on the *Navigation* tree.

The *Network Configuration* page appears.

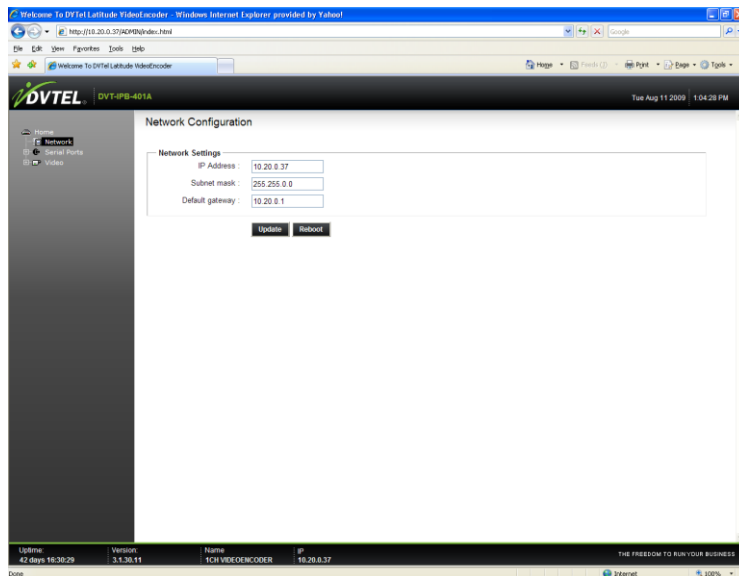


Figure 4: Network Configuration page

3. In the *IP address* field, enter the IP address of the Pro Series camera.
4. In the *Subnet Mask* field, enter the subnet mask of the Pro Series camera.
5. In the *Gateway IP* field, enter the gateway IP address of the Pro Series camera.
5. Click **Update** to change the parameters or **Reboot** to return to the default values.

Setting Video Profile Parameters

Set the video profile parameters.

To set the Video Profile parameters

1. On the Home page of the web interface, go to the *Navigation* pane.
2. Expand the *Video* branch of the *Navigation* tree, and then select **Video Profile**.

The *Video Profile* page appears.

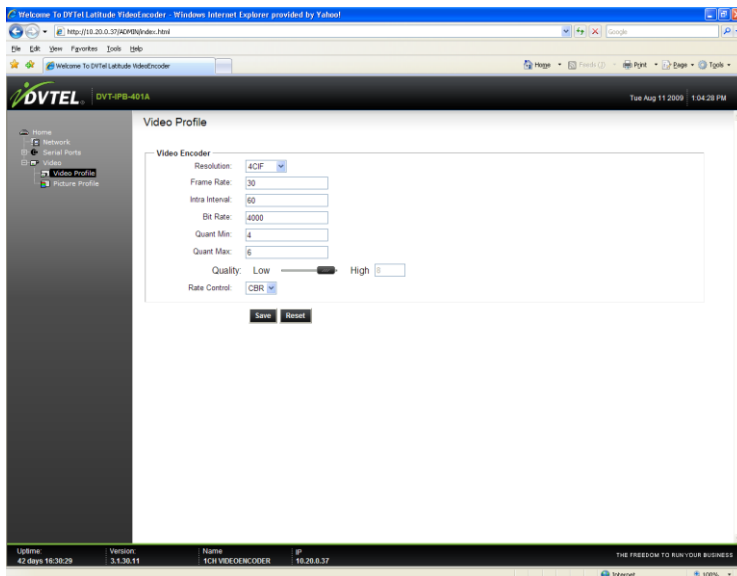


Figure 6: Video Profile page

3. Set the following parameters:

Table 3: Video Profile Parameters

Parameter	Description
Video Encoder	
Resolution	The measure of how clear and crisp the video image appears. Each resolution corresponds to a specific number of pixels (columns * lines) for each picture of the video sequence.
Frame Rate	The maximum number of frames per seconds (fps) that will be encoded and transferred by the transmitter. This parameter can be set from 1 to 30 fps.
Intra Interval	The frequency at which a complete video frame (called I-frame) is sent by the encoder. Possible values are in the 0–100 range. A value of 0 indicates that no I-frame will be sent automatically by the device; a value of X means that a complete image refresh will occur every X frames.
Bit Rate	The maximum number of bits per second generated by the device. Valid bit rates range from 32 to 6000 kbps
Quant Min	A parameter related to video quality. A higher quantizer value means less video quality but less bit rate, and vice versa. The value range is from 2 to 31.
Quant Max	A parameter related to video quality. A higher quantizer value means less video quality but less bit rate, and vice versa. The value range is from 2 to 31.

Quality	The quality of the video profile. Use the slider to adjust it to the desired quality level. The value range is from 1-10.
Rate Control	The mode controlling the bit rate variation. The available modes are: • CBR — The Constant Bit Rate mode is the most effective to maintain the target bit rate. Video quality may suffer and the frame rate may decrease. This mode should be used when transmitting video over networks that have very limited bandwidths, and with an intra interval value of 0. • CFR — The Constant Frame Rate mode maintains the target frame rate. Video quality may suffer and the bit rate may exceed the target value. • VBR — The Variable Bit Rate. In this mode, data is not sent evenly. (The rate control is disabled and the current bit rate is a function of VBRQ and therefore the bit rate can changes dramatically based on the video content.)

4. Click **Save** to change the parameters or **Reset** to return to the default values.

Setting Picture Profile Parameters

Set the picture profile parameters.

To set the Picture Profile parameters

1. On the Home page of the web interface, go to the *Navigation* pane.
2. Expand the *Video* branch of the *Navigation* tree, and then select **Picture Profile**.
The *Picture Profile* page appears.

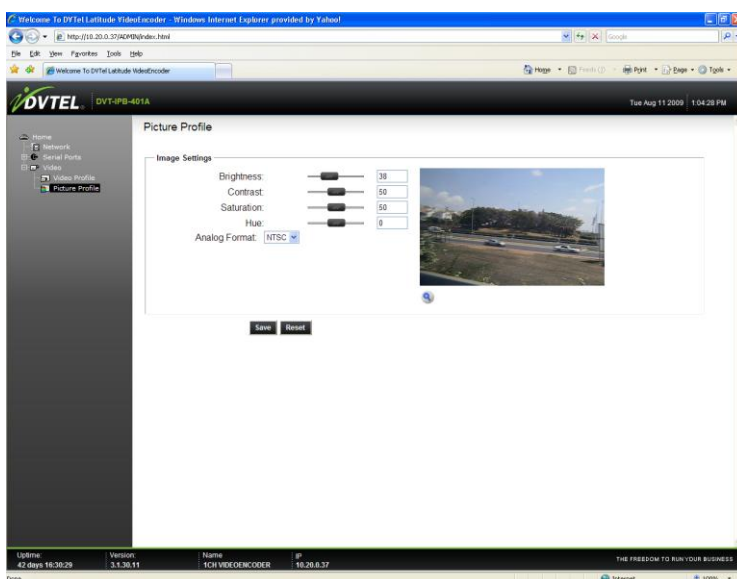


Figure 7: Picture Profile page

3. Set the following parameters:

Table 4: Picture Profile Parameters

Parameter	Description
Analog Input	
Brightness	The total amount of light in a color — Possible values range from 0-100
Contrast	The range of colors in the image — Possible values range from 0-100
Saturation	The intensity of the colors in the image — Possible values range from 0-100
Hue	The relative amounts of red, green, and blue in a color — Possible values range from -180-180
Analog Format	The analog display standard — PAL or NTSC

4. Click **Save** to change the parameters or **Reset** to return to the default values.

Using the On Screen Display (OSD)

Using the On Screen Display Menu, you can configure advanced features of the Pro Series camera. The OSD is accessed via the PTZ controls from either the ControlCenter or AdminCenter Clients by clicking the "M" icon located in the green display area just under the PTZ control keys. Click once to enter the OSD mode and again to exit.

Display Format

The information shown on the screen are described in terms of OSD display, position and function description in the table below.

OSD Menu Tree

Item	Layer 1	Layer 2	Layer 3	Default
LANGUAGE	<ENGLISH>, <JAPANESE>, <PORTUGUESE>, <SPANISH>, <FRENCH>, <GERMAN>, <ITALIAN>, <POLISH>, <RUSSIAN>, <TRADITIONAL CHINESE>,<SIMPLIFIED CHINESE>, <TURKISH>			ENGLISH
DEFAULT CAMERA	<ON>, <OFF>			ON
BACKLIGHT	<ON>	BLC LEVEL <00> ~ <30>		OFF
	<OFF>	EXIT + SAVE: YES		
FOCUS	<AUTO>	AF MODE <NORMAL>, <Z. TRIG.>, <PT TRIG.>		
		EXIT + SAVE		
	<MANUAL>			

AE MODE	EXPOSURE COMP.	<OFF>, EXPOSURE VALUE: <-10.5dB> ~ <10.5dB>		
		EXIT + SAVE: YES		
	AE MODE	AUTO	BRIGHT VALUE; SHUTTER SPEED; IRIS VALUE; GAIN VALUE: AUTO	
			EXIT + SAVE: YES	
		SHUTTER	SHUTTER SPEED PAL:<1/50>~ <1/10000> SEC. NTSC: <1/60>~ <1/10000> SEC.	
			EXIT + SAVE: YES	
		IRIS	IRIS VALUE <F1.6>	
			EXIT + SAVE: YES	
		MANUAL	BRIGHT VALUE: AUTO	
			SHUTTER SPEED PAL:<1/50> ~ <1/10000> SEC. NTSC: <1/60> ~ <1/10000> SEC.	
			IRIS VALUE <F1.6>	
			GAIN VALUE <-3>dB ~ <28>dB	
			EXIT + SAVE: YES	

	EXIT	YES		
WBC MODE	AUTO (Auto White Balance)			☆
	INDOOR			
	OUTDOOR			
	MANUAL	R GAIN <000> ~ <127>		
		B GAIN <000> ~ <127>		
		EXIT + SAVE: YES		
SETUP MENU 1	ZOOM SPEED	<8>		8
	DIGITAL ZOOM	<OFF>, <2x> ~ <12x>		OFF
	SLOW SHUTTER	<ON>, <OFF>		OFF
	D.N.R.	2D N.R., <ON>, <OFF>		ON
		3D N.R., <ON>, <OFF>		
		EXIT + SAVE: YES		
	IMAGE INVERSE	<ON>, <OFF>		OFF
	FREEZE	<ON>, <OFF>		OFF
	APERTURE	<01> ~ <16>		07
SETUP MENU 2	ENTER	FLIP	<OFF>, <M.E.>, <IMAGE>	OFF
	ANGLE ADJUSTER	ADJUST MIN ANGLE <-10> ~ <+10> DEG		00
		ADJUST MAX ANGLE <080> ~ <100> DEG		

		EXIT + SAVE: YES		90
	SPEED BY ZOOM	<ON>, <OFF>	<ON>, <OFF>	OFF
	AUTO CALI.	<ON>, <OFF>	<ON>, <OFF>	OFF
	PASSWORD	<ON>, <OFF>	<ON>, <OFF>	OFF
	OSD AUTO CLOSE	<OFF>, <5> ~ <30> SEC.	<OFF>, <5> ~ <30> SEC.	20
	CLOSE			
	SYSTEM RESET	SYSTEM RESET <YES>		
		DEFAULT SYSTEM <YES>		
		EXIT <YES>		
	EXIT	<YES>		
ID DISPLAY	<ON>, <OFF>			ON
TITLE DISPLAY	<ON>, <OFF>			OFF
TITLE SETTING	<01> ~ <16>			01
PRESET	PRESET SET	<001>~<256>		ENTER
	PRESET RUN	<001>~<256>		ENTER
	EXIT	YES		ENTER
SEQUENCE	SEQUENCE LINE	<1> ~ <8>		1
	SEQUENCE POINT	<01> ~ <64>		01
	PRESET POS.	<001> ~ <255>, <END>		001
	SPEED	<01> ~ <15>		01

	DWELL TIME	<000> ~ <127> SEC.		000
	RUN SEQUENCE	ENTER		
	EXIT	<1> ~ <8>	<YES>	
AUTOPAN	AUTOPAN LINE	<1> ~ <4>		1
	START POINT	<TO FIND>, <TO SAVE>		
	END POINT	<TO FIND>, <TO SAVE>		
	DIRECTION	<RIGHT>, <LEFT>		Right
	SPEED	<01> ~ <04>		01
	RUN AUTOPAN	ENTER		
	EXIT			
CRUISE	CRUISE LINE	<1> ~ <8>		1
	RECORD START	ENTER		
	RECORD END	ENTER		
	RUN CRUISE	ENTER		
	EXIT	ENTER		
HOME SETTING	HOME FUNCTION	<ON>, <OFF>		OFF
	SELECT MODE	PRESET, SEQUENCE, AUTOPAN, CRUISE		☆
	PRESET POINT	<001> ~ <256>		001
	SEQUENCE LINE	<001> ~ <008>		
	AUTOPAN LINE	<001> ~ <004>		
	CRUISE LINE	<001> ~ <008>		
	RETURN TIME	<001> ~ <128> MIN.		001
	GO	ENTER		

	EXIT	YES		
IR FUNCTION (Optional)	AUTO	THRESHOLD <MID>, <HI>, <LOW>		AUTO
		EXIT + SAVE: YES		
	MANUAL	IR MANUAL: <ON>, <OFF>		
		EXIT + SAVE: YES		
ALARM SETTING	ALARM PIN	<1> ~ <8>		1
	ALARM SWITCH	<ON>, <OFF>		OFF
	ALARM TYPE	<NO> (Normal Open), <NC> (Normal Close)		NC
	ALARM ACTION	PRESET, SEQUENCE, AUTOPAN, CRUISE		☆
	PRESET POINT	<001> ~ <256>		001
	SEQUENCE LINE	<001> ~ <008>		
	AUTOPAN LINE	<001> ~ <004>		
	CRUISE LINE	<001> ~ <008>		
ALARM DETECT	DWELL TIME	<001> ~ <127> SEC., <ALWAYS>		ALWAYS
	EXIT	<1> ~ <8>	YES	
WDR FUNCTION	<NONE>			
PRIVACY MASK	PRIVACY SWITCH	<ON>, <OFF>		
	TRANSPARENCY	<ON>, <OFF>		

	COLOR	<BLACK>, <WHITE>,<RED>, <GREEN>,<BLUE>, <CYAN>,<YELLOW>, <MAGENTA>		
	SET MASK	<01> ~ <16>	H CENTER: L/R	
			V CENTER: D/U	
			H SIZE <000> ~ <080>	000
			V SIZE <000> ~ <060>	000
			EXIT + SAVE	
	CLEAR MASK	<01> ~ <16>		
TIME SETTING	EXIT	YES		
	TIME DISPLAY	<ON>,<OFF>		OFF
	SET YEAR	<00> ~ <99>		
	SET MONTH	<01> ~ <12>		
	SET DAY	<01> ~ <31>		
	SET HOUR	<00> ~ <23>		
	SET MINUTE	<00> ~ <59>		
SCHEDULE	EXIT+SAVE	YES		
	SWITCH	<ON>,<OFF>		OFF
	POINT	<01> ~ <32>		01
	HOUR	<00> ~ <23>		00
	MINUTE	<00> ~ <59>		00
	MODE	NONE	NO FUNCTION	

		PRESET	PRESET POINT <001> ~ <256>	
		SEQUENCE	SEQUENCE LINE <001> ~ <008>	
		AUTOPAN	AUTOPAN LINE <001> ~ <004>	
		CRUISE	CRUISE LINE <001> ~ <008>	
		IR FUNC.	IR FUNCTION <AUTO>, <ON>, <OFF>	
	SCHEDULE RESET	YES		
	EXIT	YES		
EXIT OSD	YES			

The Command Line Interface

Note: The Command Line Interface (CLI) is a text-based menu system used primarily for service personnel to check the camera settings and certain status. Most settings shown in the CLI are actually configured using the Latitude AdminCenter Client application and in most cases changing the settings via the CLI should only be done by or at the direction of qualified technical personnel. Improper changes in the CLI could affect the performance of the Latitude system or may render the camera unavailable to view or record important video.

Accessing the Command Line Interface

It is possible to access the Command Line Interface via the *Device Configurator* or directly via Telnet.

To access the Command Line Interface via the Device Configurator

1. Start the *Device Configurator* by double-clicking the *Configurator.exe* file.
2. In the *Unit Management* pane, select the desired edge device.
3. Right-click the desired edge device, and then select **Telnet** or click  on the Unit management toolbar.

The Telnet terminal appears.

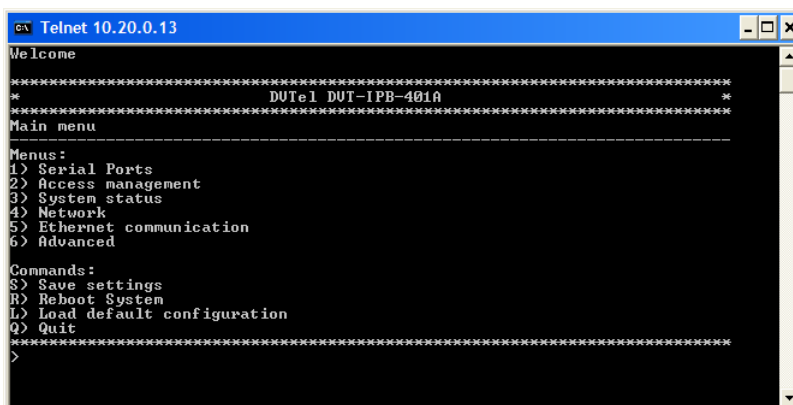


Figure 5: Telnet terminal

Using the Telnet terminal, you can access and edit all configuration parameters of the edge device.

To access the Command Line Interface via the Telnet terminal

- Using Microsoft Telnet, click **Start—Run**. In the command line, enter **telnet <host name>** (where host name is the IP address of the device), and press ENTER.
- Using the Unix / Linux Telnet, at the prompt enter **telnet <host name>** (where host name is the IP address of the device).

The Telnet terminal appears.

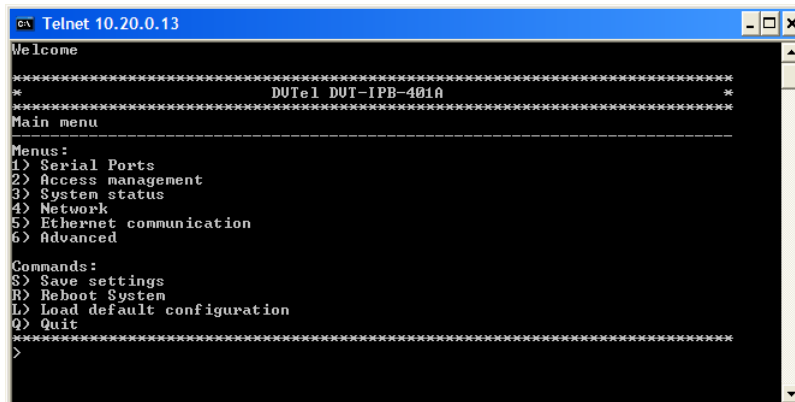


Figure 6: Telnet terminal

Using the Telnet terminal, you can access and edit all configuration parameters of the edge device.

For more information about how to configure the camera via the Command Line Interface, see

Using the Command Line Interface

Used primarily by service personnel, the command line interface (CLI) of the supported edge device can be used to check certain status or settings. The CLI is hierarchically organized, with menus, sub-menus, and individual options representing configuration parameters.

Using the CLI, you can configure the following parameters of the displayed edge device:

- *Error! Reference source not found.*
- *Error! Reference source not found.*
- *Error! Reference source not found.*
- *Error! Reference source not found.*
- *Error! Reference source not found.*
- *Error! Reference source not found.* — Video, Video Status, Serial Port Status, VSIP, VSIP Statistics, Audio, Test and Debug, Outputs Control, System Time, System Time Stats

Note:

The CLI has a time out that is triggered after three minutes of inactivity. When the time out occurs, you lose access to the command line and the Telnet terminal closes automatically.

To work with the CLI menu structure

- To execute a command or open a menu, type in the corresponding letter or number, then press ENTER.
- To return to the previous menu, type **p**.
- To save the settings, type **s** at the main menu, then press ENTER.
- To reboot the system, type **r** and then press ENTER.
- To load the default configuration of the system, type **l** and then press ENTER.
- To end the CLI work session, save your settings first. Next, type **q** at the main menu and press ENTER. Depending on the changed settings, the device may perform a soft boot.

Setting the Access Management Parameters

Via the *Access management* menu, you can define user accounts and device security.

- **User Accounts** — By defining user accounts, you can protect the configuration of the device by restricting its access with a user name and a password. Once the user account mode is activated, you need the user name/password combination to access the web interface of the device. There are two types of users — Administrator and Web Client. The administrator has all rights and is automatically available when user accounts are activated. The web client only has access to live video and the web interface. Three web clients are available.
- **Security** — When defining device security, you determine whether or not HTTP access is enabled. If HTTP access is disabled, you can only set up the device via the *Device Configurator* or Telnet.

By default, access management is disabled and administrator privileges are granted to Telnet and Web users. Access management is activated via the Telnet interface.

To set Access management parameters

1. On the Telnet main page, type **2** and press ENTER to select *Access Management*.
2. Type **1** and press ENTER to select *Security*.
3. Type **1** and press ENTER to select *HTTP Access*.
4. Select the desired option:
 - Type **1** and press ENTER to select **Enabled**.
 - Type **2** and press ENTER to select **Disabled**.

5. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
6. Type **2** and press ENTER to display the *User Account* menu.
7. Select the desired option:
 - Type **1** and press ENTER to select **Enabled**.
 - Type **2** and press ENTER to select **Disabled**.
8. When **Enabled** is selected, the *Manage User Account* menu is displayed.
9. Set the following parameters by selecting the respective menu number and pressing ENTER:

Table 6: User Account Parameters

Menu	Parameter	Description
1	Administrator user name	Enter the new parameter value and press ENTER.
2	Administrator password	Enter the new parameter value and press ENTER.
3	Web client 1 user name	Enter the new parameter value and press ENTER.
4	Web client 1 password	Enter the new parameter value and press ENTER.
5	Web client 1 enable	• Type 1 and press ENTER to select Enabled. • Type 2 and press ENTER to select Disabled.
6	Web client 2 user name	Enter the new parameter value and press ENTER.
7	Web client 2 password	Enter the new parameter value and press ENTER.
8	Web client 2 enable	• Type 1 and press ENTER to select Enabled. • Type 2 and press ENTER to select Disabled.
9	Web client 3 user name	Enter the new parameter value and press ENTER.
10	Web client 3 password	Enter the new parameter value and press ENTER.
11	Web client 3 enable	• Type 1 and press ENTER to select Enabled. • Type 2 and press ENTER to select Disabled.

- 9.
10. For each parameter, enter the desired value, and press ENTER.
11. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.

12. Type **s** and press ENTER to save the changed settings.

Setting the System Status Parameters

The system status information indicates the current values of internal device parameters. Via this menu, you can view system and storage parameters as well as to set the board temperature parameters.

To set System status parameters

1. On the Telnet main page, type **3** and press ENTER to select *System status*.

The following *System status* parameters are displayed:

- Firmware Version
- Mpeg-4 Version
- Build Date
- CPU Info
- Up time
- Serial Number
- CPU Load
- Boot loader version
- CPLD version

2. Type **2** and press ENTER to display the *Board Temperature* menu.
3. Set the following parameters by selecting the respective menu number and pressing ENTER:

Table 7: Board Temperature Parameters

Menu	Parameter	Description
1	Critical high temperature limit	Enter the new parameter value and press ENTER.
2	High temperature limit	Enter the new parameter value and press ENTER.
3	Low temperature limit	Enter the new parameter value and press ENTER.
4	Critical low temperature limit	Enter the new parameter value and press ENTER.

- 3.
4. For each parameter, enter the desired value, and press ENTER.

5. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
6. Type **s** and press ENTER to save the changed settings.

Changing Network Parameters

Warning: Changing the network parameters could render the camera unavailable for viewing or recording important video in the Latitude NVMS System.

To change the current Network parameters

1. On the Telnet main page, type **4** and press ENTER to select *Network*.
2. Set the following parameters by selecting the respective menu number and pressing ENTER:

Table 8: Network Parameters

Menu	Parameter	Description
1	DHCP Configuration	The use of DHCP (Dynamic Host Configuration protocol) to automatically get a valid network configuration for the device from a server. You can set this option only if the device is connected to a network that uses a DHCP server. • Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
2	Local IP Address	The IP address of the edge device
3	Subnet Mask	The subnet mask of the edge device
4	Gateway	The gateway IP address of the edge device
5	DNS Server Address	The primary DNS server address
7	Host Name	The Host name of the edge device
8	Ping Request Target	The IP address of the Ping target
9	Ping Request Send Buffer Size	The size of the ping packet

	Domain Name	The name of the domain in which the edge device resides. This parameter is fixed.
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- 2.
3. For each parameter, enter the desired value, and press ENTER.
4. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
5. Type **s** and press ENTER to save the changed settings.

Setting the Ethernet Communication Parameters

NOTE: Changing network settings could result in loss of critical video recording, live monitoring and or control of the camera. If unsure about these settings, consult your network administrator or installation professional for advice.

Via the *Ethernet communication* menu, you can display the NIC MAC address and set the 802.3 physical mode parameter. IEEE 802.3 is a collection of IEEE standards defining the physical layer, and the media access control (MAC) sublayer of the data link layer, of wired Ethernet.

To set the Physical Mode parameters

1. On the Telnet main page, type **5** and press ENTER to select *Ethernet communication*.
The NIC MAC address of the edge device is displayed.
2. Type **1** and press ENTER to select *802.3 Physical Mode*.
3. Select the following value of the parameter by selecting the respective menu number and pressing ENTER:

Table 9: 802.3 Physical Mode Parameters

Menu	Parameter Value
1	Auto
2	100 Mb/s Full Duplex
3	10 Mb/s Full Duplex
4	100 Mb/s Half Duplex
5	10 Mb/s Half Duplex

- 3.
4. When the desired parameter value is selected, type **p** and press ENTER repeatedly until you reach the main menu.
5. Type **s** and press ENTER to save the changed settings.

Setting Advanced Parameters

Using the *Advanced* menu, you can view or set the following parameters: Video, Video Status, Serial Port Status, VSIP, VSIP Statistics, Audio, Test and Debug, Outputs Control, System Time, System Time Stats.

To access the Advanced menu

1. On the Telnet main page, type **6** and press ENTER to select *Advanced*.
2. Select the following submenus by selecting the respective menu number and pressing ENTER:

Table 10: Advanced Submenus

Menu	Parameter	Description
1	Video	Set the video input and video standard parameters
2	Video Status	View the status of encoder 1 and 2
3	Serial Port Status	View the serial port status
4	VSIP	Set the VSIP parameters
5	VSIP Statistics	View the VSIP statistics
6	Audio	View and set audio input and output parameters
7	Test and Debug	View the debug log — internal use only
8	Outputs Control	Set the outputs control parameters
9	System Time	Set the local time and the NTP Server parameters
10	System Time Stats	View the system time statistics
11	HTTP	Set the HTTP parameters
12	Quality of Service	Set the Quality of Service parameters

2.

To view how to set the parameters of the submenus, go to the respective procedure.

3. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
4. Type **s** and press ENTER to save the changed settings.

To set the Video menu parameters

1. From the *Advanced* menu, type **1** and press ENTER to select *Video*.

You can select one of the following submenus: *Video Input*, *Video Standard* or *Video Input Type*. Once you are done setting the parameters of the selected submenu, type **p** to return to the *Video* menu.

2. To display the *Video Standard* parameters, type **2** and press ENTER.

- To select **PAL**, type **1** and press ENTER.
- To select **NTSC**, type **2** and press ENTER.

3. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the *Video* menu.

4. To display the *Video Input Type* parameters, type **3** and press ENTER.

- To select **Composite**, type **1** and press ENTER.
- To select **S-Video**, type **2** and press ENTER.

5. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the *Video* menu.

6. To display the *Video Input* parameters, type **1** and press ENTER.

You can select one of the following submenus: *Encoder 1*, *Encoder 2*, *Brightness*, *Contrast*, *Saturation*, *Hue*, or *Deinterlacing Mode*. Once you are done setting the parameters of the selected submenu, type **p** to return to the *Video Input* menu.

7. To display the *Encoder 1* or *Encoder 2* parameters, type **1** or **2**, respectively, and press ENTER.
The parameters of Encoder 1 and 2 are identical.
8. Select the following *Encoder* parameters by selecting the respective menu number and pressing ENTER:

Table 11: Encoder Parameters

Menu	Parameter	Description
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1	Target Bit Rate	The maximum number of bits per second generated by the device. Valid bit rates range from 9 to 6000 kbps. Enter the new target bit rate and press ENTER.
2	Target Frame Rate	The maximum number of frames per seconds (fps) that will be encoded and transferred by the transmitter. This parameter can be set 1-30 fps in NTSC mode and 1-25 in PAL mode. Enter the new target frame rate and press ENTER.
3	Minimum Quantizer	A parameter related to video quality. A higher quantizer value means less video quality but less bit rate, and vice versa. The value range is from 2 to 31. Enter the new parameter value and press ENTER.
4	Maximum Quantizer	A parameter related to video quality. A higher quantizer value means less video quality but less bit rate, and vice versa. The value range is from 2 to 31. Enter the new parameter value and press ENTER.
5	VBR Quantizer	A parameter related to variable bit rate. Enter the new parameter value and press ENTER.
6	Resolution	The measure of how clear and crisp the video image appears. Each resolution corresponds to a specific number of pixels (columns * lines) for each picture of the video sequence. Enter the new parameter value and press ENTER.
7	Rate Control Mode	The mode controlling the bit rate variation. The available modes are: • CBR —The Constant Bit Rate mode is the most effective to maintain the target bit rate. May drop frames rates to maintain the bit rate. • CFR —The Constant Frame Rate mode maintains the target frame rate. Bit rate may exceed the target value. • VBR — The Variable Bit Rate and no limitation on bit rate Enter the new parameter value and press ENTER.
8	Intra Interval	The frequency at which a complete video frame (called I-frame) is sent by the encoder. Possible values are in the 1–100 range. Enter the new parameter value and press ENTER.

9	Intra Refresh	Enabling the refreshing of video frames to speed up recovery from error. • Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
	Compression Mode	Displays the compression mode used (MPEG-4)
10	Initial Streaming	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
11	Current Streaming State	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
	Transport Protocol	Displays the transport protocol used (only RTP/UDP is supported)
12	Remote IP Address	The video stream destination IP
13	UDP Data Port	The video stream destination IP
14	Max Video Payload Size	Enter the new maximum payload size (ranging from 100 to 1400)
15	Using MPEG-4 H/W decoder	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
16	Energy vector (EV) transmission rate	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER

8.

9. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the *Video Input* menu.

10. Select the following submenus by typing the respective menu number and pressing ENTER:

Table 12: Video Input Parameters

Menu	Parameter	Description
4	Brightness	The total amount of light in a color — Possible values range from -128-127 Enter the new parameter value and press ENTER.

5	Contrast	The range of colors in the image — Possible values range from -128-127 Enter the new parameter value and press ENTER.
6	Saturation	The intensity of the colors in the image — Possible values range from -128-127 Enter the new parameter value and press ENTER.
7	Hue	The relative amounts of red, green, and blue in a color — Possible values range from -180-180 Enter the new parameter value and press ENTER.
8	Deinterlacing Mode	Select the desired mode: • Interlaced — type 1 and press ENTER • Deinterlaced (Linear) — type 2 and press ENTER • Deinterlaced (Motion adaptive) — type 3 and press ENTER • Field over field — type 4 and press ENTER

10.

11. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.

12. Type **s** and press ENTER to save the changed settings.

To set the Video Status menu parameters

1. From the *Advanced* menu, type **2** and press ENTER to select *Video Status*.

You can select one of the following submenus: *Encoder 1 Status* or *Encoder 2 Status*. Once you are done viewing the parameters of the selected submenu, type **p** to return to the *Video Status* menu.

2. To display the *Encoder 1 Status* parameters, type **1** and press ENTER.

3. To display the *Encoder 2 Status* parameters, type **2** and press ENTER.

The following *Video Status* parameters are displayed for both submenus:

- Current Frame Rate
- Current Bit Rate (Kb/s)
- Average Frame Rate
- Average Bit Rate (Kb/s)
- Total Frames
- Total KB

- Total I-Frame Requests
 - Total Frames Skipped
 - Video Input Locked
4. Type **R** and press ENTER to reset the statistics.
 5. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
 6. Type **s** and press ENTER to save the changed settings.

To set the Serial Port Status parameters

1. From the *Advanced* menu, type **3** and press ENTER to select *Serial Port Status*.
You can select one of the following submenus: *RS232* or *RS422/485*. Once you are done viewing the parameters of the selected submenu, type **p** to return to the *Serial Port Status* menu.
2. To display the *RS232* parameters, type **1** and press ENTER.
3. To display the *RS422/485* parameters, type **2** and press ENTER.
The following *Serial Port Status* parameters are displayed for both protocols:
 - Line Driver
 - Bytes Sent
 - Bytes Received
4. Type **R** and press ENTER to reset the statistics.
5. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
6. Type **s** and press ENTER to save the changed settings.

To set the VSIP menu parameters

1. From the *Advanced* menu, type **4** and press ENTER to select *VSIP*.
2. Select the following parameters by typing the respective menu number and pressing ENTER:

Table 13: VSIP Parameters

Menu	Parameter	Description
1	VSIP Port	The communication port used by the device for discovery. Enter the new VSIP port and press ENTER

2	VSIP Multicast IP Address	The IP address used by the device to listen for VSIP queries. Enter the new VSIP Multicast IP address and press ENTER
3	VSIP Discovery IP Address	The IP address used by the device to make its presence known with the broadcast method. Enter the new VSIP Discovery IP address and press ENTER.
4	VSIP TCP Listening State	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
5	VSIP Discovery State	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
6	VSIP Unit Name	The name of the device Enter the new VSIP unit name and press ENTER.
7	VSIP TCP Heartbeat	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
8	Unique Set Identifier	Enter the unique ID and press ENTER
9	VSIP Event Monitor IP Address	Destination IP where alarms will be sent
10	VSIP Event Monitor Port	Destination port where alarms will be sent
11	VSIP Event Monitor TCP State	How to send the alarms, TCP or UDP
12	VSIP Event Monitor GUID	Enter the new Event Monitor GUID and press ENTER

- 2.
3. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
4. Type **s** and press ENTER to save the changed settings.

To view and reset the VSIP Statistics menu parameters

1. From the *Advanced* menu, type **5** and press ENTER to select *VSIP Statistics*.
2. The following system VSIP statistics parameters are displayed:
 - Current TCP Connection Count

- Total TCP Inactive Connections Closed
 - Total TCP Connections Lost
 - Total TCP Heartbeats Sent
3. Type **1** and press ENTER to reset the statistics.
 4. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
 5. Type **s** and press ENTER to save the changed settings.

To set the Audio menu parameters

1. From the *Advanced* menu, type **6** and press ENTER to select *Audio*.

You can select one of the following submenus: *Audio Output*, *Audio Input*, *Input Compression* or *Sample Rate*. Once you are done setting the parameters of the selected submenu, type **p** to return to the *Audio* menu.
2. To set the *Audio Output* parameters, type **1** and press ENTER.
 - Select the following parameters by typing the respective menu number and pressing ENTER:

Table 14: Audio Output Parameters

Menu	Parameter	Description
1	UDP Data Port	Destination port where audio is sent
2	Remote IP Address	Enter the new remote IP address of the input source and press ENTER
3	Initial Streaming	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
4	Current Streaming State	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
	Packets Received	Displays the number of packets received
	Bytes Received	Displays the number of bytes received
	Transport Protocol	Displays the transport protocol used
R	Reset Statistics	Type r and press ENTER to reset the statistics

3. To set the *Audio Input* parameters, type **2** and press ENTER.

— Select the following parameters by typing the respective menu number and pressing ENTER:

Table 15: Audio Input Parameters

Menu	Parameter	Description
1	UDP Data Port	The port where incoming audio packets will be received
2	Remote IP Address	Enter the new remote IP address of the output target and press ENTER
3	Initial Streaming	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
4	Current Streaming State	• Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
5	Input Type	Select the desired input type of the audio source: • Line-in — type 1 and press ENTER • Microphone — type 2 and press ENTER
6	Gain	Enter the new value of the gain control (for the volume - ranging from 0 to 1000) and press ENTER
	Transport Protocol	Displays the transport protocol used for the edge device (only UDP/RTP supported)

4. To set the *Input Compression* parameter, type **3** and press ENTER.

— Type **1** and press ENTER to set the parameter to **PCM**.

— Type **2** and press ENTER to set the parameter to **uLaw**.

5. To set the *Sample Rate* parameter, type **4** and press ENTER.

— Type **1** and press ENTER to set the parameter to **8 kHz**.

— Type **2** and press ENTER to set the parameter to **32 kHz**.

6. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.

7. Type **s** and press ENTER to save the changed settings.

To view the Test and Debug menu parameters

1. From the *Advanced* menu, type **7** and press ENTER to select *Test and Debug*.

2. Type **1** and press ENTER to view the *Debug log* menu.
This menu is for internal use only and is password protected.
3. Type **p** and press ENTER repeatedly until you reach the main menu.

To set the Outputs Control menu parameters

1. From the *Advanced* menu, type **8** and press ENTER to select *Outputs Control*.
2. Type **1** and press ENTER to set the *Relay* parameter.
 - Type **1** and press ENTER to set the parameter to **ON**.
 - Type **2** and press ENTER to set the parameter to **OFF**.
3. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
4. Type **s** and press ENTER to save the changed settings.

To set the System Time menu parameters

1. From the *Advanced* menu, type **9** and press ENTER to select *System Time*.
2. Select the following parameters by typing the respective menu number and pressing ENTER:

Table 16: System Time Parameters

Menu	Parameter	Description
1	NTP Server Usage	The use of the Network Time Protocol (NTP) to get the current time. NTP uses GMT to synchronize device clock time. • Enabled — type 1 and press ENTER • Disabled — type 2 and press ENTER
2	NTP Server IP Address	The IP address of the NTP server from which the device will get the current time. Enter the new NTP server IP address and press ENTER
3	NTP Server IP Port	The IP port of the NTP server. Enter the new NTP server IP port (ranging from 1 to 65535) and press ENTER
4	NTP Server Poll Period	Enter the new NTP Polling Period (in seconds, ranging from 10 to 1000) and press ENTER

	UTC Time	Displays the current universal time and date
5	Local Time Offset	Displays the offset in minutes from the GMT time in the current time zone
	Local Time	Displays the current local time

- 2.
3. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
4. Type **s** and press ENTER to save the changed settings.

To view and reset the System Time Stats menu parameters

1. From the *Advanced* menu, type **10** and press ENTER to select *System Time Stats*.
2. The following system time statistics parameters are displayed:
 - NTP Client Sync State — This parameter can either be **synchronized** or **not synchronized**.
 - NTP last update — This parameter can either be **synchronized** or **not synchronized**.
3. Type **1** and press ENTER to reset the statistics.
4. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
5. Type **s** and press ENTER to save the changed settings.

To set the HTTP parameters

1. From the *Advanced* menu, type **11** and press ENTER to select *HTTP*.
2. The following HTTP parameters are displayed:
 - HTTP Server IP Port — This parameter can be set to the desired IP port.
 - HTTP PTZ Controls — This parameter can either be **enabled** or **disabled**.
3. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
4. Type **s** and press ENTER to save the changed settings.

To set the Quality of Service parameters

1. From the *Advanced* menu, type **12** and press ENTER to select *Quality of Service*.
2. The following Quality of Service parameters are displayed:

- Type of QoS — This parameter can either be **none**, **TOS** or **DSCP**.
 - Video Data Priority — This parameter can either be **Routine**, **Low**, **Medium**, **High** or **Critical** (when TOS is selected) or range from 0-63 (when DSCP is selected).
 - Audio Data Priority — This parameter can either be **Routine**, **Low**, **Medium**, **High** or **Critical** (when TOS is selected) or range from 0-63 (when DSCP is selected).
 - Control Data Priority — This parameter can either be **Routine**, **Low**, **Medium**, **High** or **Critical** (when TOS is selected) or range from 0-63 (when DSCP is selected).
3. When the desired option is selected, type **p** and press ENTER repeatedly until you reach the main menu.
 4. Type **s** and press ENTER to save the changed settings.

****All Specifications are subject to change without notice.**